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ART. I.—*A Report of cases treated at the Louisville Marine Hospital.* By RICHARD W. FERGUSON, M. D.

In compliance with the requisitions of the Louisville District Medical Association, the committee on Autopsies beg leave to submit the following cases (all of which have occurred in public practice) as their report.

Upon the assumption of the duties of one of your committee at the Louisville Marine Hospital, commencing the fourth day of July, the following brief history of the patient, who is the subject of the first report, was given by the student in attendance, who had been particular in gaining information of his friends, at the time of his admission.

Case I.

Henry Schneider, a native of Germany, by trade a tailor, and a man of temperate habits, was admitted on the 23d of June, 1841. His health, previous to this attack, had been generally good; but on the 15th of the month, eight days prior to his admission, he was attacked with pain in the limbs, back and head, with inability to protrude the tongue. These symptoms were soon followed by vomiting of bilious matter, loss of appetite, and high febrile excitement. He had been under the medical treatment of a German doctor, in the city, without any benefit or amelioration of symptoms. At the period of admission to the hospital he did not complain of much pain, and this was confined to the region of the liver. Pressure with the hand did not cause pain in any other part of the abdomen. His tongue was coated with a thick brown fur, edge and tip red, and perfectly dry. Some difficulty still existed in the protrusion of that organ, and its retraction seemed difficult and slow. Pulse 125 in the minute, full and resisting; skin hot and dry, thirst great.

Treatment—About twelve ounces of blood was taken from the arm, after which calomel, gr. xx., and ipecacuanha, gr. j. combined, were given every two hours: the spt. mindereri and sponging the surface of the body with tepid vinegar and water were used in conjunction, in order to moderate his fever. Under this treatment he seemed to mend. The evacuations, which were dark, offensive and thin, at first, in a few days assumed a more natural appearance.

The above mentioned treatment was pursued till within three days of the time he fell into my hands; when it was thought by his attendants that the specific action of the mercury had been obtained, and it was accordingly abandoned, substituting for it rhubarb and magnesia, which he was taking at the time he was transferred.

After carefully inspecting the condition of his mouth, a different belief was entertained, and a cautious exhibition of the mercury and ipecac was resumed. His tongue, at this time, (4th of July,) was red, dry in the centre, edge pasty, and still

exhibited the brown coat; pulse, 100 in the minute; was free from pain and uneasiness in every part of the body; his mind was clear; skin dry.

A large crop of small white vesicles was discovered to occupy, without tenderness, his breast and abdominal parietes. The dose of calomel, commenced with, was ten grains with two of ipecacuanha, to be given every four hours with alternate doses of rhubarb, aloes, and jalap. The spt. mindereri was employed in conjunction with the above named purgatives, during the continuance of fever, and until free bilious discharges could be obtained.

July 5th. Patient has had several dark green evacuations, possessing a cabbage smell; his general condition about the same. Treatment continued.

6th. Patient rested well last night; complains of thirst; can cause pain by pressure upon the liver, far round toward the vertebral column; tongue unchanged; pulse 100 and soft; has had four dejections from the bowels, presenting the same colour and smell, and about the consistence of thick gruel; temperature of the body irregular. Prescription: Calomel, ℈j., camphor gr. ij., ipecac gr. ij. conjoined with spir. mindereri as before. Farinaceous articles of food, and animal broths allowed.

7th. Patient has rested well; is free now from pain; tongue somewhat improved; pulse 104 and more open and strong; skin soft and silky. He complains of loss of appetite, and of occasional thirst. He has had five or six discharges of blood from the bowels, which, in the aggregate, was estimated at half a gallon. This blood seemed to be about the consistence of thick gruel, dark and grainy, with some few coagula intermixed. Prescription: calomel ℈ij. every six hours.

8th. Rested well; no pain; feet and hands, this morning, rather cool; those white vesicles, already noticed, still continue on the body; thirst is moderate; tongue softer and cleaner; had five operations from the bowels in 24 hours; hemorrhage checked; is now passing off dark green cabbage-scented evacuations. Treatment pursued.

9th. Has had another good night; has no pain at any point; condition of his tongue unaltered, with the exception that its edge seems thickened, but no mercurial effects exhibit themselves; vesicles are disappearing from the upper part of the body, but are full and abundant about the groins and upper half of the thighs, intermixed upon the abdomen with small red splotches; his feet are cool; pulse 112 and moderately strong. Treatment continued.

10th. Patient did not rest well last night; is somewhat delerious this morning; tongue has become dry and adhesive; skin, nevertheless, is soft; pulse 106, and not so open and free as yesterday. Vesicles and petechiæ still conspicuous; has had four or five evacuations with a strong tendency to hemorrhage again. Prescription: Calomel 3j. every five hours, until the above tendency subsides; beef tea ordered for nourishment.

11th. Tongue is less red but still dry; has thirst; pulse 104; skin very good; has had several dark green passages, with a slight admixture of blood and very offensive. Prescription: a dose of rhubarb and magnesia, ordered to-day to carry off the numerous and large doses of calomel he had been taking.

12th. Not so well; is weaker; breathing laborious; skin moist and clammy; tongue same; has had three operations, the consistence of thick gruel, with a slight tinge of blood, possessing, as before, the smell of cabbage; pulse 112, small and quick. Treatment continued.

13th. Patient decidedly worse; tongue soft on its edge, centre brown and rather dry; pulse 112; complains of being weak; sleeps with his eyes half open, the balls inverted; lies drawn up in bed, as one having a chill. Prescription: rest and nourishment. He died between the hours of 12 and 1 o'clock in the night.

Post-mortem held fifteen hours after death. Emaciation moderate; incurvation and rigidity of the fingers of both hands considerable.

The brain was given to Dr. Symmes, the Phrenologist, to exhibit and demonstrate to his class. The doctor stated, that

it was not until he was preparing the brain for the usual hardening process, that he discovered considerable softening of the organ, and this was unusual at two points—making up the phrenological compartments of hope, and—

The whole substance of the brain had been so far altered from its normal state, as to render him apprehensive that entire satisfaction in witnessing its fibrous structure (which the doctor was anxious to unfold) could not, upon that occcasion, be given. Even in this softened state, the demonstation was sufficiently clear to show its fibrous structure; it being much more conspicuous, however, in some portions than in others. The ventricles of course were not examined.

It may be proper, just here, to remark, that the doctor found out the boarding house of this man, and was duly informed by persons who knew him, who stated that his habits and character were in strict conformity with the diseased appearances as revealed in the cerebral mass.

Lungs.—Old adhesions about the root of the right lung, which organ was otherwise healthy.

Heart—Rather smaller than natural, walls thin and flaccid.

Spleen—Small but healthy.

Liver—Of the natural size, but pale and remarkably indurated; about the centre of the organ, an irregular yellowish discoloration, about four inches in diameter, gradually fading into the surrounding paler structure. Upon cutting into the organ it presented somewhat a carnified appearance.

Gall Bladder—Distended with dark green thin bile.

The stomach and the whole of the intestinal tube healthy, until we came to the ilium when it was discovered that very considerable ulceration had taken place; the blood vessels going to these ulcers were very much engorged, but there was no appearance of blood upon their surfaces. The ulcers increased in size, depth, and frequency down to the commencement of the colon, and in the caput coli there were two small ulcers.

Kidnies—healthy in their structure. The right had a vesi-

cle upon its outer surface, which might embed the half of a common size marble, filled with serum.

The mesenteric glands were found considerably enlarged. Pancreas, healthy.

Case II.

Domineck Foissel, a native of France, a man who had been once intemperate in his habits, was seized with diabetes, upwards of three years ago, and was admitted into the Louisville Marine Hospital on the 21st of June, 1841. The disease, he said, came on gradually, but could not trace or refer it to any particular cause. His health, previous to this, had been always good, excepting once, when he had asthma, of which he had been cured. The diuresis has increased upon him. At the time of his admission he passed, in the 24 hours, eighteen pints of very clear, pale urine; the discharges from the bowels were involuntary; tongue perfectly clean; skin moist; towards evening he had slight exacerbations of fever. The treatment which was adopted in the absence of the attending physician for two or three days, was one which had for its chief object, the restriction of the diuresis; he was accordingly put upon a combination of bark, uva ursi, and opium, which had a good effect, and was afterwards continued with the addition of the precipitated carbonate of iron, of which xxv. gr. were given three times a day. All farinaceous articles of food, all vegetables, excepting cabbage, were forbidden. In a few days the first prescription was discontinued, and quinine and opium were substituted. This forms a brief outline of the treatment up to the time he fell into my hands, upon the 4th of July. The following were the symptoms detailed by him to me, interrogatories being previously made.

Appetite has been always good, and his stomach easy after meals; thirst great, but less of this latterly; mouth dry when quiet, becomes moist when he talks; tongue smooth and clean; taste varies, being either salt, sweet or bitter, and never good; skin, when he was first taken, felt rough and dry,

is now soft and pleasant; emaciation, loss of strength and weariness considerable; aversion to exercise—this has to be forced on him; has always more or less pain, with sensation of weakness in the region of the kidnies. The state of his bowels for the first month was a constipated one, since then they have become much more relaxed; loss of virility; lower half of his body and feet cold; his legs œdematous, at one time even as high as the knees. The swelling is now confined to his ankles, and is very slight; acid eructations have come on lately, but are not troublesome; flatulency considerable; eyes always clear, vision much diminished, but has neither vertigo nor headache. Dyspnœa he had previous to this attack, at the time he was laboring under asthma, no difficulty in breathing since. His gums looked ulcerated, as persons having a scorbutic affection; mind disposed to be cross and irritable.

He was working on a farm when this disease came gradually upon him, accompanied with pain in the back. He does not believe that any other member of his family ever had the like disease.

July 4th. His bowels at this time were frequently operated on, and were small and discolored, probably by his ferruginous medicines. Treatment continued.

5th. Bowels less operated on; tongue as usual, perfectly smooth and clean; quantity of urine the same; his evacuations were similar to those already described.

6th. Quantity of urine the same; condition of the bowels unchanged: increase of opium to j‡ gr. at each dose, taken thrice daily.

7th. The state of the patient the same, prescription as heretofore.

8th. Not so stupid and dull this morning as he was yesterday; this state was possibly produced by the anodyne; has some pain in the back. Prescription: lactucarium gr j., Dover's powder gr. v. combined, and given three times a day.

9th. Feels pretty well this morning; diuresis reduced to 8½ pints; tongue unaltered. Prescription continued.

10th. Patient has had nine small discharges from his bow-

els since yesterday, without any straining; diuresis not quite 8 pints. Prescription continued.

12th. Diuresis 8½ pints; complains of alum whey producing flatulency; condition of his bowels unaltered; no pain whatever about the abdomen. Prescription: ol. anisi gtt. ½, two or three times a day until relieved of flatulency and to suspend the alum whey.

13th. Is relieved of flatulency; diuresis reduced to six pints. Prescription, rest.

14th. Has had nine small dark-looking discharges as usual, diuresis reduced to seven pints, this depends greatly upon the amount of water taken during the day; with a view of restricting him the more, his drinks are ordered to be tepid.

15th. Has been operated on ten times since yesterday's visit; the last evacuation looked more natural; has some uneasiness in his bowels; flow of urine reduced to 6¾ pints; has been using cabbage at dinner. Prescription: quinine gr. j., opium gr. j. combined, to be given three times a day and to withdraw his cabbage.

16th. Feels easier in his bowels; they are less operated on; passages still small and in colour like soft soap. Prescription: lactucarium and Dover's powder as given on the 8th instant.

17th. Patient does not feel so well; recurrence of purging; stools the same in character; tongue still clear; pulse, which has been generally natural, is now 96 in the minute, regular and quick; complains of pain in the region of the liver, with loss of appetite. Prescription: hydrarg, cum creta gr. v., opium gr. ½ combined to be given every four hours. Decoction of rad. columba or quassia, to be used as a tonic. Tinct. opium gtt. x. with camphor water alternately.

18th. Patient has had no discharge of urine since 12 o'clock, the night of the 16th inst. At that time he passed about ½ pint; is free from pain; did not perspire yesterday; this morning the skin acts; diarrhœa urgent all day yesterday, at intervals of fifteen or twenty minutes. The dejections looked like yeast suspended in a thin whey-colored fluid; complains of anorexia; thirst quite moderate now; tongue unaltered;

pulse, in a recumbent posture 70, sitting up is 76 in the minute. Prescription: hydrarg. cum creta gr. v. g. opium gr. j., four times a day.

19th. Diuresis, two-thirds of a pint yesterday morning, (just two days.) He has had no pain, no distension about the hypogastric region. Discharges from the bowels copius, frequent and involuntary. There is more redness than usual at the tip of the tongue; urine has a natural smell and color. Prescription: rad. columba gr. v. g., opium gr. j. to be given; the mercurial preparation discontinued.

20th. Rested well; feels stronger and better this morning; discharge of urine in 24 hours not quite one pint; tongue clean, particularly its edge, which has likewise a smoother appearance than the centre; complains of some pain in the back; pulse 70; evacuations still involuntary, and runs from him continually in a small stream. Prescription: add kino or the catechu to the powder of yesterday, and apply a burgundy pitch plaster to the small of his back.

21st. Rested very well last night; feels better this morning. Prescription the same.

22d. Rested well; feels stronger and better; diuresis one pint and a half since yesterday at 10 o'clock; head swims when he sits up; appetite good; thirst moderate; is not so much purged, but when upon the vessel he remains there upwards of an hour; passages are a pale yellow color, and of the consistence of soft soap. Prescription: give one grain of quinine three times a day, alternating with powders composed of opium and uva ursi.

23d. Somnolency very great this morning; diuresis to two pints in 24 hours; has had two dejections of a pale yellow color, and about the consistence of soft soap. Prescription: omit the uva ursi.

24th. Tongue somewhat pasty, edge soft; pulse 58 in the minute; back is a little better; diuresis not quite a pint, but his bowels have been operated on largely since midnight; stools thin and whey-like. Prescription: calomel gr. ij. g., opium gr. j. mixed, and to be given every four hours.

25th. Bowels still very much relaxed; discharges are involuntary again, and are thin and watery, having very much the color and smell of sour whey. The meat he eats passes off unchanged. Prescription: calomel gr. ij. opium iss., every four hours; his nourishment to be formed of gruel made out of parched rice; sinapisms to lumbar region.

26th. Rested pretty well in the latter part of the night; has been less purged; some little œdema about the ankles, more or less of this has occasionally presented itself throughout the attack; discharge of urine twice, half a pint each time; his bowels have been moved five times since yesterday, about the consistence of thick gruel, color a pale yellowish green; pulse 56. He expressed a desire for a little mush with salt, which was allowed.

27th. Rested well last night, though his bowels were occasionally much operated on; stools thin, and indicated feeble powers of digestion; pulse 56. Prescription: rhubarb, opium, and kino 2 gr. each, with quinine gr. j. to be given alternately with the preceding, in intervals of four hours; sinapisms to the back.

28th. Bowels in the same state; voided a pint of clear whiskey-colored urine; ankles a little swelled.

Died between the hours of three and four, on the 29th of July without any person knowing it. The nurse had been in attendance upon him at three o'clock when he was troubled still with this looseness of the bowels, but did not complain of any thing beyond this.

Post-mortem examination instituted about ten hours after death, when the following appearances were revealed:

Emaciation.—Moderate; very remarkable flexibility of the superior extremities with the usual stiffness of the inferior. The left ankle somewhat œdematous; strabismus of left eye, considered however to be accidental, there was no unnatural state of the pupils. As it was thought by your committee that the whole force of diseased action had been concentrated upon the abdominal viscera, and that it was here that pathological inquiries might be extensively made;

the head and thorax were consequently omitted in the examination; nor was their belief unsupported by the morbid appearances upon opening this cavity, which were as follows:

Liver—Somewhat enlarged; its external and internal appearance pretty good, but it possessed an uncommon degree of firmness. The only part which could be at all broken into by a thrust or continued pressure with the finger, was the superior thick portion of the right lobe, the edge or margin of whichwas likewise somewhat thickened.

Gall bladder—Moderately filled with very thick black bile.

Spleen—Small but healthy.

Stomach—Its whole surface was thickly covered with mucus. The mucous membrane itself was found considerably thickened, and very firm, so much so as to enable you to tear it off in strips. There was no other alteration than general thickening of this membrane throughout the intestinal tube, until arriving at the colon. The surface of this bowel was copiously studded over with vesicular looking pimples, which, however, contained matter of more decided consistence than is to be found in vesicular bodies, for it seemed somewhat caseous. The cœcum, was found bound down by strong adhesions to the whole iliac fossa. Within the sigmoid flexure of the colon were presented one or more singular bodies bearing the appearance of warty excrescences of a dull mulberry hue. The largest of these was not unlike in form and size the kidney bean; rather thicker and rounder than this, and pendulous from the mucous coat. These strange vegetations were more abundant, or rather more matured in the rectum.

Here they were found in different stages of perfection, ranging from the hard granulation, to the more ensanguined or purplish bodies already mentioned. These, at length, became more and more elongated in figure, and looked like numerous teats, or rather a collection of fungi, measuring from a fourth to half an inch in length. Each mushroom growth had, for its cap, a suet-like deposition, which could be easily removed. There were likewise discovered one or more surfaces or annular marks, between the size of a large spangle

and a half dime, regarded by your committee as vestiges of the dugs or fungi already described, for they correspond to their bases and were possibly removed by absorption, leaving these smooth plates within the rings, whose slightly thickened edges formed the only landmarks of prior disease at these points. The whole alimentary canal was thickly coated with a secretion of mucus.

Kidneys—Broader, thicker, and more rounded in form; somewhat hard to the touch, and rather more of a pink color than in the sound state. Their pelves, likewise, partook slightly of this hue. The investing cellular membranes and fatty portions surrounding these, and also other organs seemed to have been changed into a gelatinous amber-colored substance, which was found to be of a lighter color about the omentum. There was no remarkable odor perceptible about the urinary organs.

Bladder—Very much distended with insipid urine, which possessed also a brandy colour; mucous membrane here, as well as elsewhere, much thickened.

Mesenteric glands—Enlarged.

A small quantity of the whey-like discharges from the bowels was tested both by the action of heat and by a solution of corrosive sublimate in distilled water. Heat did not coagulate it, the solution changed its color and condition instantly, rendering it pinkish and flocculent, was at first suspended and floated in the solution, but in a little time it subsided to the bottom of the phial. The like quantity of urine (his last discharge) was treated in a similar manner, without coagulating by heat, and yielded a pale yellow deposite. This urine was perfectly clear, very much in colour like whiskey, and pricked the tongue as if there was something alkaline in its combination.

Different specimens of urine with, and without the tests exhibited.

In closing this observation, it may be proper to remark that very little was done, after he became my patient with the view of effecting a cure. Such a termination, however desi-

rable, was considered, under existing circumstances, impossible. The long continuance of the disease, its formidable nature, the inefficiency of art to combat it upon any principles of cure that were adopted by my predecessors, and that have been suggested by the profession, were quite sufficient to convince me that very little benefit, either by medicines or regimen, even in the way of alleviation could be obtained in the case. How far the above supposition was correct, the history of the patient up to this period induced it, the lesions revealed after death confirmed it. Nor was there any thing discovered in this examination, whereupon to base any certain conclusions respecting the nature of the disease.

All that can be said is, that if the kidneys, the disordered functions of which, and the pain located in the lumbar regions, conferring the characteristic features of the disease persuade to the opinion that these organs were the primary seat of it; the disordered state of the bowels, even prior to his admission to the hospital, and its unceasing concomitancy after this, together with the sudden and easy metastasis from the urinary to these organs shows that the chylopoietic and assistant chylopoietic viscera generally were not now in a less deranged state.

Case III.

Jas. B. Read, æt 36, a native of New York, was put ashore at Portland, having arrived there in some steamboat, and was brought to the Louisville Marine Hospital on the 4th of August. He was totally insensible at the time of admission, from which state he could not, for an instant, be roused, nor could any very satisfactory account be given of him; reported, however, as having been troubled with diarrhœa.

His bowels were moved the day he became an inmate of the institution. The dejections, contrary to what was anticipated from the report given, were noticed to be neither thin nor frequent.

August 5th. Patient still insensible; lies mostly with his body bent; knees drawn upwards towards his breast; occa-

sional jactitation, and frequent low moaning, as one in extreme pain. Tongue, as seen through his open mouth, thickened, dry, and red with a brown coating in the centre; skin cool, and remarkably lifeless or inelastic; pulse very small and quick; tenderness and some fulness about the region of the liver.

Blisters and sinapisms had been applied previously to my seeing him. The latter were ordered to be re-applied to his arms, and the ammonia julap to be given every half hour or hour until reaction was established. This could not be effected and he died at 7 o'clock, P. M.—insensible to the last.

Post-mortem appearances twenty hours after death. Emaciation moderate; considerable incurvation and rigidity of fingers.

Brain—Serious effusion thrown out upon the arachnoid membrane, with a heavy coating of lymph deposited on the anterior lobes; at the disparting of the optic nerves, a small coagulum of blood, was found lying near the left nerve.

The ventricles were not examined in consequence of a disposition expressed upon the part of one of your committee to save it entire for the Medical Institute, as a fine specimen of arachnitis, which was most cordially allowed.

Liver—Somewhat enlarged; its general surface possessed a turmeric color with one or more lighter yellow spots about the centre of the right lobe, the left had its margin similarly discoloured, and extending nearly all around toward the great fissure, and another at this point. The superior margin of the right lobe differed again from any other portion; its color being a light pink; the whole organ possessed somewhat an unctuous feel, was regarded therefore by two of your committee, who made the examination, as coming under the appellation of "fatty degeneration of the liver."

Gall bladder—Distended with thick dark bile; cutting into it, thick particles flowed off not unlike softened tea leaves.

In the absence of morbid specimens, which were unfortunately lost, an attempt has been made by paintings to supply this want.

Louisville, November, 1841.

ART. II.—*A case of Labour attended by some unusual appearances.* By JOHN OVERTON, M. D., of Nashville, Tenn.

Mary, a coloured woman, was seized with labour-pains, and all the concomitant symptoms of child bearing on the —— day of —— 1822. The pains were importunate and severe, accompanied by much restlessness and sudden, often-repeated and rude tossing of the body in different directions. The woman was ungovernable by the midwife, who was in attendance, and in despite of every admonition to the contrary, continued to throw herself, with considerable violence, alternately on her back and abdomen upon which she ultimately fell upon a bench. At eleven o'clock at night, succeeding the time of its commencement, the labour subsided, immediately after much tossing and agitation of the body, the fall upon the bench, before noticed.

The child, which, anterior to this occurrence, descended perceptibility into the superior strait of the pelvis, now suddenly receded and was no longer perceptible to the touch, per vias naturales. The abdomen, which, before, was tense and apparently collected about the uterine region, was now relaxed; without any contraction of its muscular portions, and diffused equally over this region, to a much greater extent than is usual in parturient women; or even in the latter months of gestation. Until this period the labour had been marked by strong and frequently repeated bearing-down pains, together with every other exertion of muscularity usually and necessarily attendant on parturition. These, however, were suddenly subsided, and, in lieu thereof, the woman ceased to toss about, remained still, on her back, and complained of a heavy pain constantly present about the umbilicus, and expressed her sensations of bodily suffering by grunts, frequently repeated, and at regular intervals; but without referring their production to any cause, necessarily in connection with the parturient state. She felt pain about the umbilicus; was sick at the stomach, and occasionally vomited, and felt general dis-

quietude and uneasiness of body; but nothing like an effort of the womb and abdominal parietes, to finish a process which had been commenced with such pressing activity. The countenance was *wild* and affrighted, and seemed indicative of a mind despondent in its hopes, defeated in its anticipations, and bowed down under the weight of a calamity which no art could evade or strength overcome. The arterial system, however, did not participate in the state of the mind or body. The pulse was sufficiently full, somewhat accelerated beyond what is usual in parturient women, but was moderately soft, round, regular, open, and slow, as respects the quickening of its pulsations. Judging by the pulse alone, there appeared nothing in the case to excite alarm; or which demanded the intervention of art, in the consummation of the delivery. The os tincæ, and other structures mechanically operative or passive in the process of child-bearing, were in a state of entire relaxation and the fœtus having receded from the superior strait of the pelvis rested upon, and by a considerable part of its mass, hung over the pelvis upon the abdominal muscles. Such was the condition of this woman when I first visited her, which was twenty-six hours after the distinct existence of labour, and fifteen after the cessation of all the uterine exertions.

Reflecting upon the phenomena furnished by the case, I was enabled, in a short time, to settle in my own mind its pathological character, as well as the indications, which it was indispensable to accomplish, to obtain relief. I concluded that the abdominal muscles had *certainly*, and the womb *probably*, suffered a mechanical injury in consequence of the excessive tossing and tumbling, and fall of the woman in the first stage of the labour; and that the cessation of the parturient exertions, being the result of a cause so durable in its nature as a bruise or laceration, were not likely again to recur; in no event soon enough to satisfy the present necessities of the system. Under these presentations I determined to turn and deliver the fœtus by the feet, without further attendance upon the efforts of nature to furnish any assistance, which she had

already obstinately denied by fifteen hours of delay. The feet were consequently brought into the vagina, yet still indulging a feeble hope that nature *might* possibly resume her work, under circumstances promising a more speedy and felicitious result, they were permitted to remain in this situation for the space of two hours, awaiting the renewal of the actions of the uterus to complete the delivery. Uterine action, however, did not occur, and the child was delivered by the efforts of the accoucheur alone, without any perceptible effort of the womb, or abdominal muscles promotive of this result; which was produced, not without much more assiduity and circumspection than is necessary in the management of ordinary births when effected by turning. The expulsive efforts of the womb having entirely ceased, there existed no power independent of the accoucheur which was at all calculated to establish the necessary relationship between the head of the fœtus and the varying dimensions of the outlet through which it was to pass.

Correctly to effect a proper adaptation of the short diameter of the head to the largest diameter of the pelvis, as varied by different portions of its extent, retarded the delivery, and constituted, after the turning was accomplished, the chief difficulty with which the accoucheur had to combat.

The fœtus having been delivered, was separated from the placental attachment, and the woman put to bed; still hoping that the womb might, after so long a respite from exertion, resume its activity, and expel the placenta from its attachments. For this purpose the patient remained without any interference, save that of greatly agitating the abdominal parietes over the uterine region, for four hours without the least appearance of contraction in the womb, or abdominal muscles. The abdomen remained soft, and as large as before delivery; manifesting an entire insensibility to the impression of any irritation to which it was subjected.

At this time the occurrence of profuse hemorrhage induced me to deliver the placenta with as much expedition as practicable. It was found in situ naturale, and detached from the womb but by a small portion of its circumference; and was

removed by means as independent of uterine exertion, as those which before had relieved this viscus from the burden of the fœtus.

After the delivery of the placenta the hemorrhage soon ceased, and the lochial evacuation which succeeded was unattended with any character in respect either to extent or duration, which rendered it peculiar; and except the relaxed and protuberant state of the abdomen, and an inconsiderable sensation of pain attributed to the region of the umbilicus, all the phenomena now portended a favorable recovery. In this condition the patient was left, with general direction for her treatment during her confinement, and a request, that should any unusual symptom occur, to send me word of it.

After a few days I was requested to visit this woman again, and found her labouring under most of the symptoms which are usually the result of mechanical violence done to any important viscus; with the modifications of these symptoms, which is perhaps always attendant upon serious lesions of the womb. The prominent causes of complaint, were a hard and painful tumor, phlegmonous in its aspect, of a circular form, of about four or five inches in diameter, the umbilicus occupying about the centre of the diseased circle. The tumor was but slightly elevated above the healthy surface of the abdomen, but in all other respects very accurately resembled an ordinary phlegmon of the abdominal parietes.

Believing that these appearances were to be attributed to mechanical injury done to the womb and abdominal muscles at the time of delivery, I directed an abstemious diet, small portions of antimony as a febrifuge, and a linseed poultice applied warm and kept constantly over the whole surface of the tumor.

This treatment was continued with but little variation, until free suppuration had been established; which was indicative as in other phlegmonious tumors, by pointing towards its centre, and an evident fluctuation of its contents from percussion with the fingers. The tumor was now opened in the ordinary manner with a lancet, and discharged at the time

about half a pint of matter greatly resembling ordinary pus, though somewhat more thin and gluey in its appearance. From this time the tumor and all the symptomatic effects which had attended its progress gradually declined; and after the lapse of five or six weeks the discharge entirely ceased and the wound was entirely cicatrised.

I have seen this woman within a few weeks. She now enjoys fine health, has grown corpulent, but has never been pregnant sice the accident above described; although at the time of its occurrence she was not more than 18 years of age. Since the accident she has menstruated.

It may be proper to add, that, at the time of delivery, there was no evidence of any injury done to the abdominal parietes, competent to account for the sudden suspension of uterine action, which occurred during the progress of the labour. There was no wound or perceptible bruise of the abdomen, or complaint of pain from injury done to this surface. I came, therefore, to the conclusion, at the time, that the womb had beeen ruptured: although the abdominal covering had suffered little comparative injury. The probable condition of the different parts subjected to the action of the same lædent cause enables me to confide in the truth of this conclusion; the abdomen was comparatively relaxed, the womb in a state of strong contraction at the time of the fall and hence the dissimilarity of its effect upon the two parts submitted to its influence.

Nashville, Sept. 8, 1841

ART. III.—*Observations on the Topography, Climate, and Diseases of a District in the Eastern part of the State of Ohio.* By THOMAS CARROLL, M. D., late of St. Clairsville, now of Cincinnati, Ohio.

This district of country lies between 39° 25', and 40° 46' north lat. Its mean breadth is about fifty miles. It is the most elevated part of the State of Ohio; the highest points being not less than one hundred and twenty feet higher than those of any other section of the State. The dividing ridge running through this tract of country approaches much nearer the Ohio than it does the rivers on the west of it. Those streams falling into the Ohio have, of course, much more velocity than those that run into the Muskingum and Tuscarawas. Several of these tributaries have a retrograde direction, which renders their velocity still less; notwithstanding the slowness of their currents, they have cut deeply into the strata, leaving high elevations on either side. Their alluviums are often extensive and subject to inundation at various seasons; this liability is much increased in consequence of the elevation and great unevenness of the country. The alluviums along the Ohio and its tributaries are not very extensive and are but seldom inundated.

With the exception of a small tract, south of Sandy creek, every portion of this district is hilly. The altitude at which most of the population live above the level of the ocean is from eleven to twelve hundred feet; being about five hundred above the Ohio river, whilst some are six or seven, perhaps, even more. But a small proportion of the population reside on the alluviums. The elevation of the country renders it but little subject to fogs; they are, however, frequent along the rivers and larger streams, but do not often mount more than half way up the hills. Above the elevation to which they reach, the air is dry and pure; hurricanes are not frequent, and when they do exist, they are not so violent as in the lower and more level parts of the State. The thermometer seldom or never rises so high nor falls so low as it does farther west. The position of the district secures it from the

bleak winds that sweep over the lakes; and its elevation seems to guard it from those long continued droughts to which, I think, the less elevated and level parts of the west are subject; I, however, have but few data to rest this opinion on. Of the natives of this district it may be said (probably with truth) that they are the most beautiful of the natives northwest of the Ohio river. They are tall, muscular, well proportioned, and evince much intellectual power.

In common with Western Pennsylvania, and some other elevated sections of country the inhabitants of this district are subject to goitre. Its prevalence, however, is much less than it was thirty years ago; and when it does occur it does not often reach the same magnitude that it did formerly. As it has declined, pulmonary consumption has increased. This fatal affection was once of rare occurrence, but of late years many fall victims to it. The exchange of goitre for this disease is of course unfavourable to the interests of human life.

My friend, Professor Darby, of Canonsburgh, Pa., informs me that he had examined the burying grounds of different districts of country for the purpose of discovering at what periods of life the greatest amount of deaths had taken place, and he found that, in Western Pennsylvania, a larger proportion, from fifteen to twenty, had occurred than he had observed any where else. This mortality was, no doubt, brought about, in a great measure, by pulmonary affections; indeed it must be conceded that the inhabitants of countries located like those under consideration have always been subject to pulmonary affections.

Eastern Ohio, in common with the west, has undergone a change within the last forty years. When the forests were unbroken but little more than the gentle breeze was felt, but as the lands were cleared off more rapid currents of air became common. Greater vicissitudes of heat and cold took place, and they increase as improvement advances, which must, of course, have an influence on the human constitution. But the people have materially changed their mode of living, their manner of dress, and above all their education has un-

dergone an immense change. Formerly females received but a slight education. A few months, during a very few winters, was all the time the girl spent at school, and frequently this was only continued for a single winter; and not unfrequently indeed her education was altogether denied. This condition of things slowly gave way, and that chiefly among the wealthier classes, to what is called a refined education. A young lady is now instructed in the country schools to read and write, with a slight knowledge of arithmetic; she is then sent to a boarding school for the purpose of having her education finished. Here she is required to spend a very large amount of her time in study, and the little exercise she takes is under peculiar restraints, which detract much from its beneficial influence. Had the pupil to endure this mode of life for a few months only she would most likely escape the awful consequences which follow, but unfortunately this course is pursued for years; one of the evils most to be lamented is, that this boarding-school part of her education is commenced at a most unfortunate period, (about the age of twelve or fourteen) and is often continued for two, three, or four years, through a period of life in which, above all others the utmost attention should be paid to the health of females. This unfortunate period, chosen for the education of girls, and the still more unfortunate manner, pursued in disposing of their time, lays the foundation of most serious mischief to their constitutions, and seems to have a peculiar tendency to derange the healthy condition of the lungs. When a *poor girl* becomes diseased, during the time she is finishing her education from home, and when her parents and teachers feel ambitious that her mental improvement should continue, but little attention is paid to her health, either by herself or her teachers. Paleness, loss of flesh and debility, do not give alarm; but at length a cough supervenes, or spitting of blood; when, for the first time, the fears of her friends are awakened, and she is sent home to receive the last charities of life. It must, however, be admitted that many others fall victims to diseases of the lungs; this is peculiarly the case with those who have been

long confined to a sedentary life. Females, I think, often bring on pulmonary complaints, by long confinement to the house; and I am not certain but that the habit, which so much prevails of late years, of excluding solar light from our houses, has not had a tendency to increase these affections, and some other forms of disease.

The changes in the diseases of the male sex, in the region of which I speak, have probably not been so great as in those of the female, and are somewhat of a different kind. During the early settlement of the south-eastern part of Ohio, suffering and labor were endured which are now but seldom experienced. Forty years ago, few of the arts of civilized life were practised west of the Alleghany mountains. Every foreign fabric was dear, and rendered doubly so, in consequence of the scarcity of money; they were, therefore, nearly excluded from the country. Shoes were but seldom worn by males under the age of fifteen, except in winter, and often not by females; hence the liability to inflammatory disease at that time. Rheumatism was among the most prevalent of this class, indeed it was so common that the sufferer but seldom had much done for his relief, and was not unfrequently laughed at when he complained. As the improvements of the country advanced, more care was taken as to the clothing of children; houses became better, and labour less severe; of course this disease measurably subsided among the young, but many, even now, who have borne the burden of settling the country, when it was a wilderness, are severely afflicted with the disease in its chronic form. But few of the young men now lead a sedentary life, nor have they at any time, unless their residence was in towns, or they were designed for one of the learned professions; such have, sometimes, become victims of pulmonary disease, or have been subjected to dyspepsia, &c. In those who devote themselves to study, these diseases are almost incurable, disinclination to exercise, and an inclination to the use of tobacco, seeming to me to be among the first causes of them.

A diseased state of the ligaments and cartilages of the joints

is probably about as prevalent here as in other sections of the Union, out of large towns and cities, from which the female suffers about as much as the male. I am inclined to the opinion, that the osseous structure, particularly of the vertebra, has suffered to a greater extent among the people of eastern Ohio, during the past forty years than in other parts where less severe labour has heen endured, as I have known several instances of diseased spine which manifestly had their origin from severe lifting.

During the colder season of the year a singular species of inflammatory disease is occasionally met with, and sometimes frequently. It consists of an inflammatory affection of one side of the head, attended with fever; the blood, when drawn, exhibiting a cupped and buffy coat. The eye and ear of the side affected are most pained. There are throbbing and intolarence of light, accompanied with fulness or swelling of the side of the head. The pain is more intense during the after part of the day and fore part of the night; subsiding towards morning, and again increasing towards noon. Sometimes this disease, or one similar to it, is met with in nervous females during the spring and summer, and when it appears in them it seems to assume the character incident to a similar affection in districts, subject to bilious diseases and may sometimes be relieved by the same treatment, but the inflammatory kind must be managed in a different way. As the complaint will generally continue for at least ten days it will be necessary to take this into consideration when the treatment shall be commenced. The reason why this affection continues so long, is, that the fluids have to undergo, as in other inflammatory diseases, a radical change before health can be completely restored.

In the treatment bleeding should first be had recourse to; then purging, followed by antimonials, which should be given throughout the complaint, in doses so moderate that much sickness will not be produced, if any. If the pain in the eye or ear be very great, taking blood from the temporal artery will be of great service; cupping, after the system has lost

enough by general bleeding, will be found very serviceable. It should be recollected that this disease is attended with severe inflammatory symptoms, and that there is always danger of inflammation of the brain, or its membranes, unless an active treatment be adopted.

The remitting and intermitting fevers of this region were, during the early settlement of the country, regular summer and autumnal visiters of the valleys of the Ohio, Muskingum, Tuscarawas, and of those of most of their large tributaries. With the advance of improvement, the disposition to these fevers has lessened until it has almost disappeared along the Ohio and its small tributaries. This, however, is not the case on the alluviums of the other streams. It will probably be long before these latter localities can claim an exemption from them. The total disappearance of drift-wood from these waters, and the straightening and embanking of some of them, would, in all probability, render their margins healthy to a much greater extent, than they now are; as inundation would by these means be in a great measure prevented. Many years must, however, elapse before that attention will be paid to this matter which will insure a general exemption from these fevers.

The inhabitants of the high lands, are very seldom affected with these diseases, particularly with intermitting fever; unless they expose themselves to the miasma of low situations. The high grounds, however, lying to the northeast of extensive low lands sometimes subject their inhabitants to these fevers. I recollect a locality very near New Lisbon, in Columbiana county, where persons were attacked at the distance of a mile and a half from the origin of the malaria, notwithstanding that a dense forest intervened. The origin of the malaria was, however, to be found in the extensive flooding by a mill-dam of a wooded alluvium. Take the country for twenty miles west of the Ohio, and extending from the Pennsylvania line to Marietta, and, I apprehend, no district, between it and the Mississippi has so great an exemption from these fevers. Indeed, no country could be much better

calculated to restore to perfect health constitutions partially broken down by remitting and intermitting fevers.

Autumnal fevers, when they occur, have more of the continued than of the remitting type; and seem to run insensibly into the continued fevers which appear late in the fall, and during the winter. Of these fevers I shall speak by and by, but shall now proceed to make a few observations on dysentery, which occasionally visits this region during the summer and autumn; and is not unfrequently severe and fatal. Dysentery most usually makes its appearance during dry weather, when the smaller streams are nearly dried up. I have not been able to discover, that this disease is owing to improper indulgence in summer or autumnal fruits, or in any particular diet, though it is no doubt occasionally *excited* by improper food. I have, several times, known it to occur in neighborhoods where fruit was rare and where the inhabitants lived on simple food. I think it is more frequently rife when vegetation is rendered languid by long continued drought, or when it begins to decline during autumn. Dysentery seems here to be governed by laws very nearly connected with those that govern autumnal fevers; this is particularly the case with regard to its duration.

The dysentery of this section has more intensity of character than it has in miasmatic localities. The fever is more continuous and the pain more constant; hence there is more fatality in the same number of cases. In its acute form but few diseases proceed with more rapidity to a fatal termination, and very few cause so much suffering. The subacute form is more tolerable as the patient has occasional intermissions of pain. In a few of the worst cases of acute dysentery, which I have seen, the patient had no respite from pain till the approach of death. In confirmation of this, I shall give the following case:

Miss G., aged 23, was taken, in September, 1829, with dysentery. The pain was unremitting from the first, and the evacuations frequent and bloody, accompanied with tenesmus, and great tenderness of the abdomen. In conse-

quence of the condition of the abdominal viscera, the breathing was short and difficult; there was sweating of the face, with moisture of the surface generally, which was about the natural temperature. I saw this unfortunate patient on the third day of her illness, for the first time. She was bled and purged; calomel and opium were administered in large doses, accompanied with cupping and the warm bath, but all without effect. She died thirty-six hours after I first saw her. But little mitigation of the pain was produced by any medicine or prescription that was made.

Children more frequently die of this disease than adults, and observation has led me to conclude that females fall victims to it more frequently than males. But few adults, however, are lost when the treatment is early commenced and persued judiciously throughout. This is peculiarly the case in the treatment of the subacute form.

Humanity owes much to the science of medicine for the improved treatment of this disease, yet old methods of cure still have their place and that which is inert or absolutely injurious is sometimes prescribed with all the solemnity attendant on the exhibition of the most potent and appropriate medicines.

Among the prescriptions that are compartively inert, may be counted the various mucilaginous drinks, such as those from gum arabic, and slippery-elm bark. A common prescription in the country, even now, is mutton soup and other articles of a similar kind which are administered whenever the sufferer can receive them without vomiting; and those are given from the very onset of the disease. I think it must be admitted that physicians are too careless about matters of this kind, for they sometimes approve of small quantities and often suffer their patients to be fed to death without saying a word against it. Can they believe that murder, committed by stuffing the stomach when the colon is inflamed, is not a crime?

I would gladly pass over without reprobation another prescription, which physicians cling to with much greater

tenacity than their patients—I mean injections. I am not certain that *I* ought to judge of them, as I must confess that I long since became prejudiced against their use by their effects in my own case. I never look back to the period when I was tortured by them without having a worse feeling against them than any man ought to have against an enemy. Opiates given by the mouth seem to me always to have as soothing a tendency as when administered by injection; and then all the horrible irritation which follows injections is avoided.

From the description I have given of dysentery, as it occasionally has occurred in this part of the country, it will no doubt be admitted that, under similar circumstances, an active treatment should be adopted and persevered in for some days, particularly in the acute forms of the disease. The course which I usually adopted in severe cases was to bleed freely at the onset, then to give an emetic of tartarized antimony, or ipecacuanha and calomel. As soon as vomiting had ceased a cathartic was administered of calomel followed by sulphate of magnesia; or jalap in strong constitutions, was substituted for the salts. When the cathartic had operated about twice pretty freely, calomel and opium were given in the proportion of ten grains of the former and one of the latter, with half a grain of ipecacuanha. About double this amount was administered at once, and repeated every four, six, or eight hours, as necessity required, until the mouth became affected with the mercury, or other specific effects were produced. It was often necessary to watch, with care, the effects that this medicine produced; for salivation was not always produced even by the largest doses, as many patients were not susceptible of its salivating operation. Such patients were, however, susceptible, very frequently of the constitutional operation of mercury, which could be known by the general condition of the system. In subacute cases smaller quantities of both opium and calomel were found sufficient; for instance, five grains of calomel, with one of opium, and half a grain of ipecacuanha, was observed to be enough for patients whose

constitution, had been broken down by using mercury to excess. Sometimes the blue pill was substituted, in ten grain doses, with Dover's powder, or what was better, sulphate of morphia and ipecac., which were found to answer better with nervous subjects. During the time this treatment was used attention was also paid to the skin. The warm bath was used twice a day, or oftener when it was practicable, and was found of much service. When the bath could not be used fomentations were substituted and were found of much service, indeed they were applied whether general bathing could be employed or not. But few general bleedings can be useful in most cases of dysentery, and so soon as the lancet is laid aside, local bleeding, by cups, is important, and I often found this method of drawing blood of great use. If there was much blood discharged and great soreness of the abdomen, I mostly found cupping useful; where great debility is present it will be of much service to use dry cupping; about half a dozen cups, set over the abdomen, will invite considerable blood to the surface, and I have often found that much relief from soreness and pain was experienced by the patient. It will probably be unimportant for me to say anything about the treatment that was pursued with most advantage in the close of the disease, when mucus and blood were no longer discharged, and where a diarrhœa had set in. I may remark, however, that acetate of lead with cretaceous preparations and opiates were then most to be relied on.

In long continued cases I have often found blistering of service, and sometimes warm brandy and laudanum have a happy effect when used as a fomentation over the abdomen during the night.

The reader has above observed the recommendation of epsom salts as a cathartic in dysentery; this recommendation grows out of long experience in the use of this medicine. I thought, many years ago, that hydragogue cathartics had more influence, when judiciously combined with mercurials, in overcoming the morbid action of the bowels than any other

cathartics, and more extended experience still has confirmed me in my former opinion.

The continued fevers of this region are more to be feared than any others, unless it be the eruptive; and probably no change of living nor alteration of the face of the country will ever eradicate them. Their existence is not determined by the season of the year, however they mostly commence in the latter part of autumn, when their characteristics approach more to those of remitting fevers than they do at other seasons. When they commence in autum, they often continue into the winter, or even through that season; and when they begin in winter, they frequently run on till spring. I recollect that one of these fevers began in the fall or early part of winter and continued through the ensuing spring and summer. This was in the year 1814, before I studied medicine, so that I can say but little about the true nature of it. I believe, however, that it wore a different aspect, in some particulars, from the winter fevers that have since appeared.

These continued fevers seem to depend upon a different cause or causes, from those which give origin to remitting and intermitting fevers; the former are found mostly on the high lands, and more often on those that are sterile than the rich; whilst the latter infest the alluvial districts, or marshy plains. In the common acceptation of the word, most of this district is infertile; the lands having a clay substratum often combined with a smaller or greater proportion of iron, but with little or no lime in their composition. Portions of the country, it is true, are rich, but they are not often of great extent; yet, probably one third of the *whole* may be considered good and some of it very productive. Lands of the latter description are clothed, when uncultivated, with native forests of great luxuriance and beauty, composed of walnut, sugar maple, buckeye, and other trees which delight in a fertile soil. These rich soils have mostly a considerable quantity of lime in their composition. The springs here have more lime in their waters than exists in those of the poorer sections; and they are generally more abundant.

As a medical man I observed the continued fever, for the first time, in November, 1823. It then existed near New Lisbon, and on the high and poor lands south of that town. In this locality it was peculiarly mortal. I again witnessed it at St. Clairsville, Belmont county, and the immediate neighborhood, late in the autumn of 1826. Here the land is of the finest quality, and the water limestone. I attended more than fifty cases within a very small space. It has, within the last sixteen years, frequently appeared in different portions of the southern and western parts of Belmont county, and also in Jefferson, Harrison, and other contiguous counties, no doubt oftener during winter than in any other season.

This fever often begins in a single individual of a family, and no other instance will be met with for a week or two, when one or more of the same family will be taken ill, and after some days, one or more of those who visit and attend on the sick, will, in their turn, sicken, and their friends, after attending them for some days, will also be taken down. In this way this fever seems to propagate itself. No people, probably, pay more attention to the sick than the members of the *Society* of *Friends*, and among them I have noticed the winter fevers to be peculiarly frequent; and have observed it extended to a great number. These facts have had a strong tendency to make me believe that this fever could be communicated from one individual to another. Further observation will, no doubt, decide this matter. The temperate, as well as the intemperate, are subject to its ravages. Circumstances in the mode of living seem to make but little difference, and children, as well as adults are obnoxious to it.

When an individual is about being taken with this fever he appears languid, has a bad appetite, and complains sometimes of a headache, and again of pain in the back; inclines to sleep, though his slumbers are disturbed, and he rises from them without feeling refreshed. After some days spent in this way, he gets out of bed but seldom, eats little or none, and his mind sometimes wanders when he is aroused. In a day or two more he lies all the time unless his brain be seriously affected, when

he is often much inclined to sit up, even when very ill. If his skin be examined during this time it will be found dry and inactive, and when pinched into folds it regains its smoothness very slowly, showing the loss of its elasticity. There is commonly but little flushing of the face at the commencement of the disease, but, as the fever advances, this symptom becomes more developed, especially in the after part of the day, and in some cases is eventually relieved by sweating. If the brain be diseased early, he will often show slight delirium, and will mostly complain of disagreeable feelings when he shakes his head, which he will not do without being urged; the eyes frequently become more brilliant than usual, and there is sometimes morbid acuteness of vision, with suffusion of the conjunctiva. Headache is not always present when the brain or its membranes are affected, and it is often present when the result shows that these parts were very little, if at all, inflamed. When the patient gets down it will be found that the fever is regularly augmented in the afternoon, and during the fore part of the night, when it begins to become more mild and abates considerably against morning; but is again renewed with the same result as before. It, however, is commonly more severe, every other day throughout the course. During the continuance of the fever, the surface is *generally* somewhat above the natural temperature, though it is often not warmer than in health, and frequently as cool or even cooler. Sometimes this fever appears in an acute form, running its course in a few days. In these cases, the brain or heart is most deeply affected, sometimes one of these organs being more diseased and sometimes the other. When the heart is affected, the pulse has an irregular beat, and seems corded, and occasionally intermits; but when the brain is affected there are delirium, pain in the head, with subsultus, intolerence of light, &c. The acute form is sometimes occasionally ushered in with chills. This symptom is, however, seldom observed at the commencement of the subacute. A dry tongue is very common at all periods, but especially in the latter, when it is often brown in the centre, with a flabby in-

active appearance. When the patient attempts to put it out it seems to catch on the teeth. It is sometimes pointed. The former of these symptoms is unfavorable, the latter more so.

It is, probably, unnecessary to say any thing now about the symptoms which mark a favorable termination of the fever. I will, however, make a few remarks on those that are unfavorable. Great irritability of the stomach with pain in it and the bowels, and tenderness of the epigastrium and abdomen generally, are unfavorable; hemorrhage from the bowels is among the most unfavorable symptoms; and still more so is a swelling of the penis; indeed I have but seldom seen a recovery from fever when this symptom supervenes. The want of the tonic contraction of the cremaster muscles is also unfavorable; when this is the case, the testes are found low in the scrotum which is also relaxed. I am inclined to think that when these two last symptoms are present the brain is incurably affected. It might be improper for me to pass over another symptom that I have often witnessed. When you lift one of the forearms, so that it forms with the arm a right angle, and hold it there a few moments, and then take your hand away, if it be retained by the patient in this position, voluntarily, until it begins to tremble, and then falls without a voluntary act of the patient, it may be considered that danger is present and the chances of recovery are few.

We will now take a view of the treatment that should be pursued in the cure of this fever. It must always be borne in mind that it has a duration of from seven days to seven weeks, and is sometimes extended much farther, for, by leaving this matter out of the question, I think I have seen no little damage done. If the physician begins the treatment with an idea that he will terminate the fever in a few days by medicine he will be almost certain to do injury, and will often have to submit to the mortification of losing his patient. It is a matter then of moment that, when the treatment is begun, the physician should come to the conclusion at the outset that he will only attempt to moderate the force of the fever, and that he will direct such means as will have a ten-

dency to establish a healthy condition of the secretions and excretions by degrees: always recollecting that local irritations should be relieved by local as well as general means. By taking a course of this kind very few patients will be lost, because the physician sees a-head and wards off the dangers that lie in the way, whilst he knows that if he ever exhausts the powers of the system it must sink before the disease arrives at the goal pointed out by nature. I would not be willing to say that this fever is in no case arrested in its origin by a decided course of treatment, but I well know how much disappointment I have witnessed growing out of such a course.

The first step to be taken in the acute form of this fever is to bleed until the patient either approaches to syncope or does faint; to effect this, without danger, he should be in a sitting or erect position when bled. As soon as he partially recovers from the effect of the loss of blood, he should be placed in a sitting position, when two or three gallons of cold water ought to be dashed over him; if his head be much affected it should be allowed to fall in a heavy stream on it, for by this means it will be much relieved. It then becomes necessary to administer either a cathartic or an emetic. If the patient have a foul tongue and his head be not much affected, the latter should be preferred; but if these circumstances do not exist the former should be chosen. Should the physician determine in favor of an emetic he will consult the interests of his patient by giving him, in some warm water, half a grain of tartar emetic, and one or two grains of ipecacuanha, combined, every half hour until vomiting is effected. It is now important that a powerful cathartic should be given, composed, in most cases, of calomel and jalap, or for the jalap, castor oil or senna and salts, or, in weak constitutions, rhubarb. After a free cathartic effect has been obtained, tartar emetic should be given in such doses as will not sicken, and be persevered in throughout the disease, unless it should be found that it does not agree with the patient. But few cases will be met with, however, where a twelfth of a grain cannot be borne, and

this amount will be sufficient to begin with, and should it be borne with ease, the dose can be increased as occasion may require. It should be given every four or six hours. After a free cathartic influence has been obtained, twenty grains of calomel should also be given and repeated every six or eight hours, until the mouth becomes sore, or the specific effect is produced on the general system; for many cases will be met with where the mouth cannot be made sore, yet the constitutional influence of the mercury will be obtained. When the calomel has been given until it has produced its specific effect, no more should afterwards be exhibited than enough to keep the secretions of the alimentary canal right. Two or three grains a day will be found sufficient for this purpose, and if profuse salivation should occur, no more should be given for at least a week. It has been a favorite opinion with many, that when salivation is once produced, the fever of course ceases. This opinion is, however, fallacious, for nothing is more common than to see the fever go on for weeks after the specific influence of mercury has been induced. It is true that it is generally mitigated by the mercurial action, but by no means always destroyed.

When the disease commences in a slow manner, the patient not even complaining of chilliness, it may be called subacute, and must be treated more mildly. If there be no tenderness of the epigastrium, and if the brain be not affected, the treatment may be commenced with an emetic, after which a dose of calomel and jalap or rhubarb should be administered, and repeated every few hours until it operates. So soon as the bowels are cleared, antimonials should be given and continued as directed above. Five grains of calomel, or more, should be given every four or six hours until the mouth is made slightly sore, or the general system is affected, which will be known by an increased fulness and regularity of the pulse. When this is brought about, all has been done that can be advantageously accomplished by mercury in large doses. As in acute cases the action of the liver and the secretions and excretions of the abdominal viscera, generally, should be kept in a proper state

of activity. This can be best done by calomel or the blue pill. I am much in favor of the latter in female patients, and in all delicate or enfeebled constitutions. One or two alvine evacuations should be procured daily through the fore and middle part of the fever; but if it continue for a long time, as for more than two weeks, I would only wish one evacuation a day, or one every other, or every third day, if the patient should be very low. Rhubarb, combined with compound extract of colocynth and a small proportion of ipecacuanha, will form a very good combination for the purpose; the physician will, however, find jalap, salts, and senna, and magnesia to answer a good purpose.

When there is local inflammation or congestion of the brain, or of any other part of the system, whether in the acute or subacute form of the disease, attention must be given to it. If in the brain or its membranes, keeping the hair wet with cold or tepid water, will be of use. Cupping on the temples, or back of the neck, will also be of much service. Should these not relieve, I would advise blistering on the head or neck. When there is pain in the small of the back, cupping and blistering will be of much service. If the stomach be irritable, or if there be tenderness of the epigastrium, cupping should be used and after it blistering. If the patient be weak, it would be better not to scarify. If there be pain or tenderness generally diffused over the abdomen, cupping should never be neglected. Half a dozen cups either with or without scarification, will give great relief, and this may be repeated several times, if the irritability continue. Local applications may be used with advantage.

It is a matter of moment in the treatment of this fever, that nothing shall be done to bring the pulse below the natural standard for any length of time. I would always prefer having a pulse a little above this standard. When it falls below means should be taken to raise it. This is effected by the addition of camphor, ammonia, good wine or brandy. Opium will often be found useful, particularly when combined with ipecacuanha, but I think five grain doses of camphor

with a grain of ipecacuanha, if the latter be admissible will answer a better purpose than most other stimulants. Sulphate of morphia or opium may be added if thought proper. If these three medicines be given in combination, when there is a disposition to sweat, their effects will be most salutary. I should not neglect to observe that sulphate of quinine if given in moderate doses, is a medicine of great value in the treatment of this fever when much debility is present.

Much has been said for and against bleeding in the cure of this fever, and it has been urged that physicians who have been in the habit of bleeding for it have often been unfortunate; this I cannot deny. Bleeding is but seldom necessary as the warm or cold affusion will generally moderate the force of the fever more safely than bleeding; indeed I would advise the young practitioner to resort to the lancet with much caution, for if he bleeds so that the pulse does not regain a firm beat he will assuredly lose his patient.

Sometimes after this fever has existed for a number of days, or even weeks, hemorrhage from the bowels takes place. This may be feared, when the tongue of a sudden loses a thick coat, which comes off in flakes, and leaves the surface smooth and red with a polished appearance, and in cases where but little emaciation has taken place, and where there is fulness of the abdomen. The most common cause of its appearance is excessive purgation for a number of days. This is particularly the case where calomel has been given in large quantities at the same time that cold water has been administered largely. Some practitioners never give up the administration of calomel in frightful doses, until their patients are either salivated or poisoned to death. Uninterrupted purging is wrong, and giving mercury with an idea that it does no good unless the patient be salivated is as bad. This most potent medicine is shamefully abused in this way, and I am not certain but that its indiscriminate exhibition with cold drinks often has a most injurious tendency. When hemorrhage occurs it becomes necessary at once to cease giving the purgative medicine, and to give opiates every six or eight hours, until the

bleeding ceases. The addition of ipecacuanha to the opium will be useful, and if but little mercury has been administered, moderate quantities of calomel should be combined with the opium or morphine. Dry cupping will be important over the abdomen, after which a blister should be applied. Purging must not be attempted under four or five days, when rhubarb or castor oil should be given slowly until the operation is procured; when this is effected, great care should be taken to avoid frequent purging. Quinine is often of much use after great loss of blood in this way; wine and brandy are also useful. The first cases of this affection which I saw all terminated unfavorably; indeed I at one time almost came to the conclusion that death was inevitable, but eventually being called to a case in my own practice, where the family had given large doses of salts, I concluded that I would try calomel, opium and ipecacuanha, and I had the satisfaction of saving my patient, and have not lost one since with bleeding from the bowels. I did not suffer the patient in this case to take any cathartic medicine for more than a week. However, in about five days he had an operation from the effects of the calomel. When I first saw this patient I thought all was over with him as I found him in a fainting condition from the loss of blood. Since the time I attended this case I have seen several nearly as bad and some much worse, yet they all recovered.

In conclusion I may observe, that if the method which I have laid down for the treatment of this fever be pursued but few cases will be lost. During a residence as a practitioner of medicine in this district of country, which I have described, for eighteen years, I lost but very few cases, probably not more than one in each year, and indeed I shall always look back with pleasure upon my success in the treatment of these cases.

Oct., 1841.

ART. IV.—*A case of injury of the Head with loss of a portion of the Brain and recovery.* By Dr. THO. H. TODD, of Starkville, Mississippi.

At dusk, on the 3d of August, 1838, I was called to visit a boy belonging to Col. R. S. Lyon, ten miles in the country, who had been thrown from a horse early that evening. My brother, Dr. J. J. Todd, reached the patient about 10 o'clock at night. He fonnd the boy, aged 10 or 12, very stupid and dull, yet he was rational and could be roused to a state of consciousness; he had vomited occasionally and had three or four fits before he saw him. On examining the wound he found the bone extensively fractured and very much depressed. Not having prepared himself with instuments to go into an operation; he sent for me to assist him, and to get the necessary instruments. I did not reach the place before 11 o'clock next day, when we proceeded at once to operate.

The boy had been thrown from a horse and the animal kicked him as he fell. The injury was over the right eye, midway between the superciliary ridge and the edge of the hair, lacerating the soft parts an inch and a half. The hemorrhage was profuse at the time, and we could now discover a considerable quantity of cerebral matter adhering to the adjacent parts. After placing the patient upon a table, we lengthened the wound in the integuments, and made a second incision at right-angles with the former, and dissected up the integuments, until the injury done the bone was fairly exposed. The fracture was extensive, and several portions of bone were found driven through the drura-mater, and penetrating the substance of the brain. We elevated and removed all the detached portions of bone, which left an opening something larger than a half dollar piece of silver; when this was done we removed a teaspoonful, perhaps, of the substance of the brain and several coagula of dark color, which was followed by considerable hemorrhage. After the operation was thus far completed we took one stitch to aid the adhesive strips in keeping the lips

of the wound in contact, and applied a compress and the six-tailed bandage to keep the dressing to its proper place. A tickling sensation over the abdomen, with a constant desire to scratch and have it rubbed, attended during the whole time of the operation. We left the boy comfortable, though somewhat exhausted.

5th. Patient has rested well; no excitement. Ordered rhubarb and calcined magnesia to move the bowels.

6th. Has rested well and seems cheerful; some excitement; bled him, and gave a dose of ol. ricini, as the bowels have not been moved since last visit. Directed the lancet to be used if excitement returned; diet to consist of water gruel.

7th. Oil operated well; it was found necessary to repeat the bleeding last night; and still there is too much arterial action; bled him moderately which reduced the pulse and produced quietness.

8th. Rested well; appears cheerful; wound beginning to suppurate; tongue furred. Ordered a small dose of calomel and ipecac.

9th. Medicine operated very well; wound suppurating finely; symptoms good as heretofore.

10th. Patient more restless last night than usual; some excitement; the nurse thought he had a fit this morning; mind still clear; no headache; bled twice during the day, which removed the excitement and rendered the skin soft.

12th. Patient doing well; all the symptoms being favorable.

15th. The general symptoms continue favorable; a fungus cerebri has, however, made its appearance since last date for which a compress has been applied.

20th. The fungus seems to be gradually diminishing in size. From this time the boy's improvement was steady. He is now in fine health and his mind is unimpaired.

December, 1841.

ART. V.—*Case of Chronic Cystitis, terminating fatally.* By Dr. R. B. HARPER, of Tipton county, Tennessee.

The subject of this case was a boy 3 years of age, the son of N. H. N. of this county. The history of the case as given by the parents was as follows: Some time during the latter end of last autumn, their son told them that a rail had fallen on him, but it gave them little uneasiness as he did not complain of much pain. The first symptom that excited alarm was the passage with his urine of a considerable quantity of blood. This discharge kept up for several days, becoming mingled with what appeared to be pus—sometimes with long white lumps, as his parents expressed it, which evidently was coagulated lymph. This symptom occurred early in January. After a time the lymph ceased to be discharged and he began to experience great difficulty in voiding his urine. The usual preparation of balsam copaiva was prescribed by a physician, but without any advantage. The urine was voided drop by drop, and accumulating in the bladder gave him great distress. I was applied to on the 19th of March, and on examination found the bladder much distended, the external orifice of the urethra inflamed, the desire to micturate incessant, and the discharge of urine which was scant attended with severe pain.

I prescribed an ointment which removed the inflammation of the external orifice of the urethra, and relieved the pain of micturition. Ordered cathartics, blisters and uva ursi, which generally afford relief in such cases, but in this without benefit, as the bladder continued to be distended. I resorted to the use of the catheter and pressure on the abdomen, but with no better results. The urine did not flow through the catheter, and yet I was satisfied that there was no mechanical obstruction, and that the difficulty grew out of a deposit of coagulable lymph in the bladder which had nearly filled its cavity. This was verified by the autopsy, which was afforded by the death of the patient, inflammation of the brain having supervened and terminated his sufferings on the 20th of April.

Autopsy. An incision having been made above the pubis into the bladder it discovered that it was nearly filled with coagulated lymph, amounting to about half a pint in quantity. It had formed an attachment to the bladder on its surface between the ureters. A portion of the lymph was pendulous, and extended into the neck of the bladder. That portion was red and apparently organized, resembling the heart of a squirrel. Other portions were white and fibrous in their texture with bloodvessels passing through their substance. I have preserved the specimen for the Pathological Cabinet of the Medical Institute of Louisville.

I will subjoin a memorandum of a case of *ovarian dropsy*, in which I resorted to tapping with success.

Mrs. F., of Obion county, æt. 35 years, was the subject of this disease, which had existed about 10 years. I resorted to an operation on the 12th of May, 1840, and drew off four gallons of water. The fluid has not collected again, and the lady now enjoys excellent health.

May 4, 1841.

ART. VI.—*A Description of the different grades of Bilious Remittent Fever, as they occur in the Wabash Valley and particularly in Clark county, Illinois.* By JAMES SMICK, M. D., of Darwin.

The valley of the Wabash furnishes the most extensive field for observation on the grades of bilious fever, with which I am acquainted; and it may not perhaps be uninteresting to the medical profession for me to state what my experience has taught me on that subject during a residence of eleven years in Darwin, Clark county, Illinois.

TOPOGRAPHY.—The Wabash is a beautiful river, running generally south. Its banks are very low, and extend back from one to three miles. Darwin is situated on a bluff bank

on the west side of the river about eighteen feet above high water mark, at the upper end of Walnut prairie which stretches southward from it. At the south end of the prairie, Mill Creek empties into the river about six miles below Darwin. The ground for three or four miles above its mouth is very low, and liable to be overflowed at a high stage of water. East of Darwin on the opposite side of the river is a low bottom four miles wide. The land next to the river is higher than it is back. Several small bayous lead back to the lower grounds. North of Darwin about 5 miles, Big Creek empties into the river. The land about its mouth is for some distance very low also, and is overflowed as well as about the mouths of some smaller streams which empty between it and Darwin. West of Darwin about a mile we meet a low strip of land which bounds the prairie westward and encircles it. There are also on the prairie some bayous leading from the river to basins, forming ponds. In a high stage of water these are large, covering many acres and are never entirely dry. The face of the country is generally level. The soil is alluvial and very rich, consisting of sand and black loam. There is a much greater proportion of sand in the soil of the high prairie than of the low lands which are overflowed. The bottoms are covered with a heavy growth of timber, such as is peculiar to a very rich soil. On the edges of the prairie it is shrubby in consequence of the annual burning of the prairie before it was settled. Such of the above described lands as are overflowed are, after the month of May, covered with a very rank growth of vegetation of every kind. Such of the prairie as is not under cultivation is covered with a heavy growth of prairie grass, sometimes six or eight feet high. The low strip of land, west of the prairie, between the breaks of Big and Mill creeks, is what we call barrens. The soil is of a more argillaceous nature and consequently very wet. Though I have here described a limited tract of country, yet the general features of this description apply with but little variation to the whole valley of the Wabash through its length, so far as I have travelled over it. The general character, too, of the diseases is the same through the whole valley.

We generally have a very high stage of water sometime during the months of March, April, or the first part of May. This general rule has never failed since my residence here but in one year, 1833, when we had no high water until the last of June. Some years we have two freshets. In 1834 and 1836, the second came in the last of May and first of June. In 1837 the second rise came in July.

We have more or less of every grade of fever from the simplest intermittent to the most fatal remittent, every year. But in those years in which there has been a late rise of the river we had an unusual number of cases of the severest grade. Our sickly season, as it is familiarly called here, begins about the 1st of July and continues until the frosts in the fall. Usually in the latter part of June and the first of July cases of diarrhœa and cholera-morbus occur; then some of the milder cases of remittent fever; and about the first of August the severe grade make their appearance.

Predisposing Causes.—Among the predisposing causes the first and principal is marsh-miasma. All that is necessary to produce it exists abundantly every season, i. e., heat, moisture, and vegetable decomposition, but most abundantly in those seasons in which the river overflows its banks after vegetation has sprung up in the bottoms. Then, after the water has retired, the smell of decaying vegetable matter is very perceptible. The heavy growth of timber upon the bottom lands delays the process of decomposition, as it presents the full action of the sun upon the decaying vegetation and prevents the escape of miasmata already generated. In those seasons when we have a late rise, we have not only an additional number of cases, but an increased malignancy in the character of the disease. This fact, together with the smell which in those seasons is so distinguishable, indicates the real source of malaria. In those seasons congestive and hepatic modification of bilious fever were by far the most common, and the cases were the most numerous, every family suffering more or less—the old settlers being the most exempt.

In those seasons in which the river takes no late rise, sick-

ness is confined to the neighborhood of the ponds, to those spots where a large quantity of grass grows in the river, or where the current is not swift enough to carry off all decaying matter, and to the neighborhood of mill ponds. The turning of a heavy coat of prairie grass under in the fall and opening it in the spring to the action of the sun is, I think, a very fruitful cause of miasma. It would seem also that corn, when growing very rank, throws out malaira; for those families whose houses are closely surrounded by it on all sides are sick more or less every year. Where the bottom logs of a house are in a state of decay, or the floor rests upon the ground, the inhabitants suffer every year. Our summers are warm, the thermometer standing often as high as 96°. Probably those rainy summers in which the river takes a second rise, are not as warm as the drier ones, though here I cannot speak positively as I have no thermometer. Exposure upon the prairie to the heat of the sun and the reflection of this heat from the sand, stimulating the liver to morbid action, is a predisposing cause of fever.

Persons coming from a healthy region, or where there is little of the chill and fever and residing on the Wabash amidst these various causes of disease, are universally sick the first or second year after their removal, unless they are laboring under some chronic disease. If this is the case their health usually improves. Nervous temperaments are not so liable to fever here as bilious and sanguine.

Exciting Causes.—Among these may be reckoned overloading the stomach with indigestible food or with such as will sour; exposure to the north or north-east wind which is quite cold even in the month of August. The change occasioned by the rise of this wind is very sudden sometimes, and very great. The thermometer may, in two hours, sink from 90° to 60°. Such a sudden reduction of heat in the surrounding air throws the fluids in from the surface upon the internal organs of the system. I think such exposure the most common cause of relapse. Any sudden check of perspiration operates as an exciting cause; the drinking of old

drinks when the system is preternaturally heated—sleeping with open windows and doors; marsh miasma becomes an exciting cause when applied in this way. Fatigue may justly be reckoned another of these causes.

Prophylactics.—A residence should always be chosen on the west or south-west side of marshes, or of the river, and a skirt of timber should be left between the house and the source of miasma, where it exists naturally; and if not, one should be planted so as to intercept the miasma. Where it is possible ponds should be drained. And where the banks of the river will permit levees should be thown across the mouths of the bayous, to prevent the influx of water during a fresh. The under-growth should be cut out of the low timbered bottoms, and a sufficient number of cattle kept in them to destroy the growth of the wild vegetation, until the tame grasses can be made completely to sod them. Houses without cellars should be sufficiently elevated to admit a current of air under them. A heavy growth should not be permitted in the yard of any kind of vegetation, with the exception of blue grass and shade trees. Corn should not grow very near.

I think that if the above hints are appreciated by the people of the Wabash as they deserve to be, and are once acted upon, we may expect to enjoy a freedom from such sickness as now yearly visits us. Those whose bowels are costive or who are subject to a bilious purging, should take a dose of blue pills as often as is necessary to correct either, and carefully avoid all crude indigestible articles of food and any exposure to the cold north or north-east winds.

Pathology.—I do not expect, under this head, to discuss the various theories that exist upon this subject, but to give what I conceive to be the true pathology of bilious fever, from the observations which my limited means have enabled me to make. Both the anatomical theory of Broussias and his followers, and the congestive theory of Armstrong and his followers are founded in error; taking an effect of the fever for the cause. The reasoning by which these great theories are sustained, is too well known to the profession for me to

mention it here. My own ideas cannot be better expressed than in the words of Prof. Yandell, occurring in his essay on bilious fever in the Western Journal of Medicine and Surgery, September number, 1841, page 179: "The malaria exerts its first influence upon the nervous system. The nerves of the cerebro-spinal axis are first disturbed. Hence the languor and general malaise, the precursors of an attack of fever. The nervous system is marked by a peculiar law—that of periodicity or intermission. It is active, and reposes by turns. Repose is essential to its health. Intermission being an attribute of the tissue which sustains the first morbid impression, the same character is stamped upon the disease. All essential fevers exhibit this tendency, and in one type, the intermission is complete. All diseases located in the nervous system are intermittent, notwithstanding that the cause may be permanent. A spicula of bone, for example, irritating the brain may excite epilepsy recurring at distant intervals, though the irritation be always present. And, in like manner, coma, catalepsy and hysteria recur periodically, while the cause of irritation may be some permanent organic lesion. In fever, the system of nerves controlling animal life being depressed, all parts of the system—the skin, the viscera, and all the organs of circulation—are disturbed with it. For it is not mere depression of action; it is action also perverted. Congestions of the viscera, abdominal, thoracic, and cerebral, occur, which changes of temperature, irregularities of all sorts, fatigue, etc., especially favor; and these congestions being repeated, to be followed, still, by violent reaction, lesions at length are established in some system of organs, and become independent foci of irritation, reacting upon the cerebro-spinal axis, and increasing and perpetuating the morbid commotion." This constitutes the first class of phenomena in fever and "the repetition and excessive amount of the local congestions recurring in the cold stages of fevers, give rise to a hyperæmic condition of the affected organs. This condition frequently exci ted leads at least to local inflammation. New local inflammations are set up in various organs, and those which, in the

beginning were only the effect of disease, become by reaction on the system the cause of its continuance." In one case it produces inflammation of the mucous surface of the stomach and bowels during the continuance of the febrile excitement. This condition commences at the first with the chill and continues only until the fever subsides; but after a few paroxysms the inflammation lasts all the time. This constitutes what may be termed gastric remittent fever, and in another case it may produce the same effects on the stomach and bowels, deep-seated congestion in various organs, followed by a broken reaction and in some cases by no reaction at all. This constitutes what is usually termed congestive fever. And in other cases, a more violent reaction follows the chill, which assumes a continued form, with violent congestion of the liver, which seems in some cases completely locked up, and in others to take on a morbid action, throwing out a large quantity of irritated bile with great oppression of the ganglionic plexus of nerves supplying the liver. This constitutes what may be termed the hepatic modification of bilious fever.

Thus we have varieties of bilious remittent fever, marked by sufficiently distinct symptoms, which for therapeutical purposes should be considered under different heads.

Perhaps the advocates of the anatomical theory examined cases of the first two varieties above mentioned, which would give, on a post-mortem examination, the appearances which they claim. And perhaps the advocates of the congestive theory examined only cases of the last variety, in support of their theory. And this may be the reason why they have not better argued. I make this as a mere suggestion, hoping it may excite the attention of some one whose opportunities will enable him to make the observations necessary in order to arrive at correct conclusions on this subject. So far as my observation relative to the different varieties of bilious fever, as it has occurred here, in the Wabash valley, during an extensive practice of eleven years, has extended, all the cases which have come within my notice have assumed some one of the above forms, with the exception of the simple intermittent

and the common bilious remittent fever of authors. That I may be better understood, I will treat each class separately.

1st. Gastric Modification of Bilious Remittent Fever.—This is the mildest of the three varieties. It commences with a chill followed by a fever, and in its mildest form, a slight fever occurs on the evening of the next day after the attack, lasting until the recurrence of the chill on the third day. After a few paroxysms in this way, usually at the commencement of the third chill, a severe vomiting comes on and continues until reaction is fairly established, which is after about three hours, and then a purging succeeds, which continues as long as the excitement lasts. In the first paroxysm, which is attended with vomiting, the drinks that are taken, and in some cases bile, are all that is thrown up. But in a majority of cases during the succeeding paroxysms, blood is both vomited and purged, in some cases abundantly, in others in moderate quantity. At this stage the patient complains of great heat at the stomach, with an intolerable thirst; and if drinks are taken to satisfy it they are immediately rejected. In a majority of the cases, during the continuance of the purging, severe pains are complained of through the whole region of the bowels. These last mentioned symptoms are experienced only in the paroxysms which are preceded by a chill. When this variety takes on the severest form, the chill is of the quotidian type, and of course the respite between the paroxysms is not so long; and the disease terminates sooner. If it does not prove fatal before the ninth day, as it dose in the severe form, unless arrested by medicine; it assumes the form of diarrhœa attended with chronic gastro-enteritic inflammation, which in most cases yields very slowly to medicine. The pulse is very rapid, but in general not very strong during the whole course of the disease, but more especially so after the vomiting and purging of blood takes place. The heat of the surface during the fever is very considerable, but in most cases terminates in a gentle, and in some cases, a profuse perspiration.

The tongue is oftenest covered with a white coating, sometimes, however, with a yellow one; during the first few paroxysms it is moist, then it becomes dry during the paroxysm, and when the disease assumes the chronic form mentioned above, it is covered with a dry brown coat. The breathing during the paroxysms is very irregular. Just before vomiting it is very quick and somewhat laborious; and immediately after, or while the patient is free from extreme sickness at the stomach, it is quite easy, and sometimes rather slow. The countenance expresses considerable anxiety; the features are sharp; the eyes are sunken; and when the disease continues long, they become inflamed. The patient sleeps with them partly open, and before a fatal termination, they are almost entirely open and turned upwards and back. Subsultus tendinum sometimes attends the last stage, but not so frequently as in some of the other forms. An irresistible disposition to sleep comes on before death, from which the patient frequently starts as if alarmed.

I regard as the most unfavorable symptoms, a copious watery or bloody purging, which is not easily controlled by medicines—the patient's showing by moaning, talking in sleep, and other signs that he is in considerable pain, while if asked he replies that he feels well—a brown dry tongue; small feeble pulse, and somnolency amounting in some cases to complete stupor. In 1833 and 1834 the vomiting and purging were, in a majority of cases, attended with severe cramping of the arms and legs and abdomen; since then it occurs more rarely, but attends in some cases every year. This form of fever sometimes runs into the congestive form, especially if emetics of tartar are used.

Diagnosis.—This form of fever is distinguished, first, from the congestive form by its having a regular stage of excitement after each chill and less sweating. The surface is more full than in the congestive form—not so contracted. The tongue is also drier. This form is attended also with more pain, especially in the bowels, and with more acute feeling generally than the congestive variety.

Secondly; it is distinguished from the hepatic variety by its having a chill before every other and in some cases every paroxysm, with an intermission in some cases, and in others, a distinct remission. The skin and conjunctiva of the eyes are not so yellow in this form as in the hepatic.

Treatment.—In this variety there are two great indications of cure: First, to allay the irritation of the stomach and bowels, and moderate the excessive febrile excitement; and, secondly, during the remission or intermission, if there be one, to prevent the recurrence of the next paroxysm. To accomplish the first, should there be much vomiting, I give a draught of soda water in a state of effervescence, with 18 or 20 drops of laudanum in it, immediately after each vomiting. If this should not be sufficient to stop it, give 20 drops of laudanum with 6 drops of essence of peppermint every two hours; apply also a sinapism to the pit of the stomach. Where the above remedies do not lie upon the stomach long enough to have the desired effect, apply a cloth wet in laudanum, or opium moistened sufficiently to admit of its being spread, to the pit of the stomach, after the mustard seed poultice is taken off. Let this remain as long as there is any sickness at the stomach. And to moderate the febrile excitement, I give a teaspoonful of spirits nitre dulcis every two hours, and sponge the surface with equal parts of warm vinegar and water, or weak soap-suds warm, as often as the heat is considerable. Applied warm it has a much better effect then when applied cold. It hastens the third or sweating stage, which terminates the paroxysm. It should be applied freely and often—as often as is necessary to keep down the excessive heat. After the irritation is sufficiently subsided, give powders composed of 6 grains of calomel and ½ grain of opium, where there is much purging ½ grain, every three hours until three or four are taken. If they do not operate sufficiently within four or five hours after the last is taken, give a dose of castor oil or rhubarb, sufficient to operate. As soon as the operations become watery and large, check the purging with laudanum or opium in substance. If

the chill should recur while the system is under the operation of the physic, the vomiting and purging will be much greater in the next paroxysm; therefore, the operation of it should be checked always before it is expected. I follow this course in each paroxysm, until the secretions in general become free and healthy, especially from the liver, or the fever is checked by means hereafter mentioned, to be used during the remission or intermission. Where the patient has been once salivated, or the constitution is easily affected by calomel, its effects should be closely watched upon the glandular system and its use never continued long enough to produce ptyalism, if it can be avoided. I have never seen any good, but on the contrary, much inconvenience, as the result of such a state. Calomel in small unirritating doses, repeated at short intervals, worked off by some mild cathartic, at a time when the system is freest from irritation, while its effects upon the glandular system are fully ascertained before more is given, produces a much better effect in this and the congestive form of fever, according to my experience, than when given in large doses.

The effect produced by it is more under the control of the physician. The use of opium under any circumstances, during the febrile excitement, is, I know, strongly objected to by almost all writers on this subject. The successful operation of the other remedies depends upon the promptness with which the irritation of the stomach and bowels is allayed; and I have found no medicine to answer this purpose, in this and the congestive variety of fever, better than opium or laudanum. The injury said to be produced by it upon the brain, I have never seen to follow its use. The delirium is no greater after than before it was given, but the ease experienced by the sufferer is almost indescribable. The torpor of the bowels, feared from its use, does not follow when it is given as directed above. It is to be given only where the vomiting and purging are too severe to be permitted to continue; and these are to be controlled at any time regardless of the fever.

To answer the second grand indication, in recent cases and all others at any stage, where the symptoms indicate no inflammation of the stomach and bowels, or any other important organ, during the remission I give large doses of quinine in the paroxysm that is preceded by a chill, just before it comes on: say from 1 to 10 grains, varying the dose according to the age and condition of the patient. My usual portion is 6 grains for an adult. The first dose of this size should be given about four hours before the chill is expected; and a second, one hour before the chill. And in cases where the disease has existed some days, or where the chill is of the quotidian type, a portion should be given every six hours, until the time for the next regular paroxysm has passed. This is necessary in order to prevent the recurrence of the chill, which sometimes supervenes eight hours after its usual time, in cases where this precaution is not taken. In recent cases this is unnecessary. The last portion may be given two hours before the time of the regular paroxysm.

Large doses of quinine have succeeded in my hands far better than smaller ones, both in this and the congestive form of fever. In cases where the tenderness of the bowels on pressure, the dry tongue, and the excitement continuing from chill to chill contraindicate the use of quinine, I give a powder composed of 3 grains of gum camphor, 4 grains of calomel and ½ grain of opium once in three hours, commencing seven hours before the chill is expected, until three of them are given. These should be repeated, commencing seven hours before the recurrence of the next chill. In most cases the first course will check the chill, but the fever is apt to rise at about its usual period, but it also disappears after the second course of powders. When these camphor powders are used during the remission, the calomel and opium powders directed to be used in the stage of excitement are to be omitted. In their stead a cathartic of castor oil may be administered, whose operation should be over when the time arrives for the use of the camphor powders. This ca-

thartic should follow each course of powders, unless the bowels are sufficiently moved without it.

When the disease assumes the chronic form, a pill may be given composed of 1 grain opium, 4 grains calomel, and 2 grains ipecac. once in three hours until four are taken, following them in about four hours with a dose of castor oil and 8 or 10 drops of turpentine, unless the bowels are sufficiently moved without.

These pills followed by the oil and turpentine should be repeated every twenty-four hours, until the operations become healthy, and the pain and tenderness of the epigastric region, and the excessive purging are entirely relived. As soon as the calomel in the above receipt affects the mouth, it should be discontinued, while the other medicines are to be still given. The drinks should be gum water, slippery elm water and the like. If the case does not yield readily to the above means, a blister should be applied to the bowels, sufficiently large to cover the whole seat of the pain. Where there is a copious bloody purging, large doses of opium have in my hands had the best effects in stopping it. In severe cases I have given with the happiest effects, as much as 4 grains every four hours, but the dose should be varied to suit existing circumstances. When large quantities of yellow bile are vomited, laudanum will not arrest it; two or three swallows of water as hot as it can be taken, drank occasionally, and after each spell of vomiting, will succeed in so reducing the quantity of bile that laudanum will arrest it entirely.

2dly. The Congestive variety of Bilious Remittent Fever.—This is a more fatal form of fever than the preceding. It is nothing more nor less than the "algid intermittent" of Alibert. Its type is the same as that of the preceding variety, except that the chill oftener precedes fever every day than in the former. The chill continues from one to six hours before the excitement follows; this, though sometimes considerable, does not in the majority of cases rise very high. In many cases the patient complains of great

heat of the surface, while the skin continues only cold. In most instances there is a copious perspiration standing in great drops on many parts of the system, warm where the surface is warm and cold where it is cold. Sometimes this perspiration appears only while the sickness is great. There is always great irritation of the stomach and bowels. Vomiting usually commences with the chill and continues at intervals through the paroxysm if not prevented by medicine. The fluid vomited is for the most part the drinks that are taken, sometimes accompanied with blood. Sometimes there is in the vomited fluid a substance resembling small pieces of flesh floating. The operations from the bowels are very large and watery and tinged with bile. In other instances clear blood is vomited, and in others still a fluid resembling the washings of meat, or sometimes of a whitish or rather milky color. The countenance is ghastly and very expressive of anxiety, the lips generally blue, the eyes deeply sunken, and the tongue moist and generally not very thickly furred, and livid spots appear on various parts of the body.

The senses are not much affected, sometimes indeed the intellectual faculties are rather acute and the patient disposed to talk a great deal. The voice is hollow and sometimes reduced to a whisper. Occasionally indeed we see them become delirius as soon as the fever rises, and sink into a state of complete stupor from which it is difficult to arouse them until the paroxysm has passed. In such cases there is less purging than in the others, and less sweating until the fever begins to subside. The breathing, when the surface is covered with a cold sweat and the mind is not much affected, is frequently made by a long deep sigh; and when stupor prevails is more laborious still. The patient is generally very restless, tosses about a great deal, but does not suffer much pain. Incoherent speech, subsultus tendinum, involuntary discharges of the bowels and a marble coldness of the extremities, are symptoms which generally precede a fatal termination.

Diagnosis.—In this variety the excitement which follows

the chill is not so regular. The surface, especially the extremities, are much cooler and covered with a more profuse perspiration. The tongue is also more moist than it is in the former variety. It is distinguished from the hepatic variety by a more general perspiration, and a less excitement, and a marked state of intermission or remission.

Treatment.—In this variety we have three great indications of cure; first, to allay the irritation of the stomach and bowels. Second, to moderate the excitement where that exists, and where the reaction is broken or not established, to produce an equilibrium of excitement through the system in the paroxysm; and, Thirdly, during the intermission or remission to prevent a recurrence of the paroxysm.

To fulfil the first I use about the same remedies recommended for this purpose in the gastric variety, viz: laudanum in soda water, or peppermint and laudanum, the sinapism to the stomach, and the application of moistened opium after the mustard seed poultice is taken off. These must be varied to suit existing circumstances. After the irritation is in some degree allayed, a general reaction sometimes follows without the use of revulsives. It is therefore absolutely necessary that this should be sufficiently allayed to check the vomiting and purging, or our effort to produce reaction will be unavailing. After the vomiting and purging are sufficiently allayed, a powder composed of 1 gr. opium, 6 grs. calomel and 2 grs. camphor should be given every four hours until four are taken. And in those cases where the intermission is not sufficiently long to admit the use of quinine, according to directions to be given, the powders should be so administered that the last one will be taken about an hour before the recurrence of the paroxysm. Cathartics should be used very carefully in this form of fever, but if the bowels should not be moved within six or eight hours after the last powder is taken, let oil be given if it can fairly operate before another chill is expected; if not, defer it until the chill has passed and its accompanying irritation has subsided. I generally combine camphor with all the calomel which I give in this form; it seems to facilitate

its action upon the system, causing it to produce the desired effect sooner. In severe cases I repeat the powders every twenty-four hours, and in milder ones every thirty-six hours until the discharges show a healthy state of secretion, especially from the bowels, and from the liver, or until the calomel affects the mouth. A cathartic should follow each course of powders unless the bowels are sufficiently moved without it. To moderate the excitement, where that is excessive, the surface should be frequently sponged with warm vinegar and water as in the former variety. Where the reaction is broken let the surface be rubbed with warm camphor and warm vinegar with cayenne pepper boiled in it alternately. The rubbing should be resorted to every few minutes; it should be brisk and done under the bed-clothes. And should the extremities be very cold they should be wiped off dry and wrapped in warm dry flannels after each rubbing. Warm brandy may also be rubbed on with advantage. This rubbing should be diligently maintained in cases requiring it until reaction is fairly established. But if the system should run into a complete state of collapse, or should it be in that state when the physician is called, the "cold water dash" should be resorted to. A quantity of water should be poured from a pitcher or small pail for a minute or two upon the surface, which should then be wiped off dry as quick as possible and wrapped in warm blankets. A little brandy toddy sweetened well with loaf sugar should be given immediately after, and if the purging is great, 25 or 30 drops of laudanum. It is important too that the rubbing, spoken of above, should be kept up from time to time under the clothes. If reaction does not ensue in an hour and a half after the application of water, let it be repeated in the same manner. This will succeed when no other remedy will, and should never be neglected in the asphyxiated stage. After reaction is fairly established the treatment before recommended should be pursued. The third indication of cure is to prevent if possible the recurrence of the chill, and to secure this result large doses of quinine answer better than any and all other remedies that my ingenuity

could invent, or that I have ever seen recommended by authors for this purpose. Indeed it is the only thing that can be relied upon, and even that, in some cases, fails. As soon as the remission or intermission is sufficiently distinct, it should be given in 10 gr. doses every six hours, and so timed that the last powder shall be taken about an hour before the chill is expected. And if there should be an error in the calculation of the time and the chill should return sooner than it was expected, a portion should be given as soon as the symptoms of its return are felt. It should be resorted to in each interval of fever, unless some symptom should contra-indicate its use—such as a stomach too irritable to receive and retain it, severe pain in the stomach, or pain in the head with large bloody discharges from the bowels. In such cases, which are but few, it should be omitted and the camphor powders mentioned above should be given before the chill, so that the system may be under their influence when its time arrives.

When the patient sinks into a state of stupor, I apply a blister to the back of the neck, baths of mustard seed to the soles of the feet, and wet the head frequently with spirits of camphor or vinegar and water, in addition to other remedies. Whenever large quantities of clear blood or bloody water are discharged from the bowels, opium pills in 2 gr. doses should be given every three hours until it is stopped. After the patient becomes convalescent, which is between the third and seventh day, he should take an occasional dose of blue pills to keep the bowels regular, and some tonic mixture to restore the tone of the stomach, either small doses of quinine or a bitter made of Peruvian barks, gentian and rhubarb in wine or brandy, and taken three or four times a day for some days. This facilitates the recovery very much, and at the same time tends to prevent a relapse, a thing very apt to occur both after this form of fever and the gastric variety.

3dly. The Hepatic Modification of Bilious Fever.—This form so far as my observation goes is by far the most fatal one: it is very malignant in its character. It may very justly be compared to a "dog that bites without barking." Its

attack is very insidious. The patient complains for several days of not feeling very well, and in the evening has a little fever, but not sufficient often even to attract his attention, much less to cause him to take medicine. It may exist a week in this way before it is fully developed. In such an attack it is not preceded by a chill, but often its approach is more sudden, commencing with a short chill followed by a high fever that takes on the continued form. In some instances there are evening exacerbations, and slight morning remissions growing less and less distinct; in others the exacerbations last from 1 o'clock to 6 in the evening, and from 1 o'clock to 6 in the morning with evening and morning remissions, showing two distinct paroxysms in 24 hours. Sometimes these paroxysms are preceded by slight chilly sensations in the back and some little coldness of the fingers and toes. Generally a severe pain is felt in the forehead immediately above the eyes and in the back part of the head, and a severe aching in the knee joints and bones generally. The pulse is at first quick and generally strong, and sometimes hard, but after the disease takes on a typhoid type, it is very frequent, beating as often as 150 a minute; sometimes rather intermittent, at others weak. During the exacerbation strong pulsation can be perceived in the carotid and temporal arteries at some distance from the bed-side. A throbbing can be distinctly felt in the right hypochondrium and epigastrium. The surface is at first of a red and sometimes of a yellow hue, but does not usually assume the yellow appearance before the third or fifth day. The cheeks are at first flushed, but after the seventh day, sometimes later, they assume a cadaverous appearance. The countenance at this time is very ghastly, the face hippocratic. There is a great restlessness, especially after the irritable excitement comes on, in the typhoid stage. The tongue is at first coated over with a thick yellow fur, it is at first moist but gradually becomes dry, and as the moisture leaves it its color changes to brown and sometimes to black with a depression in the centre. While dry it cracks considerably and in some cases bleeds. The patient is some-

times unable to protrude it beyond the teeth. The voice is at this time very mumbling.

The patient complains of considerable sickness from the commencement, and some vomit occasionally; in others the stomach contracts forcibly once or twice, throwing up a considerable quantity of fluid without being much sick. This fluid is mostly the drinks that have been taken, occasionally, however, it is green bile. This latter I consider a very dangerous symptom. The discharges from the bowels are of a muddy brown, sometimes of a green color, and generally very watery. Towards the last the liver throws out a quantity of pitchy, black bile. The urine is highly colored. There is but little sweating in this form at first, and it is confined entirely to the face and breast, but about the seventh day or ninth it becomes more general. The symptoms which denote a fatal termination are subsultus tendinum—the patient's endeavoring to rise from the bed without assigning any reason for it; incoherent speech; double vision or the loss of vision; involuntary discharges of a dark pitchy matter; laborious breathing, especially in making an inspiration; cold, clammy sweat. Death supervenes usually between the seventh and eleventh days, sometimes not until the 21st.

This fever, in its commencement, is of the inflammatory diathesis, but if not broken up before the seventh or occasionally the ninth day, it assumes a typhoid character, which is attended with a diarrhœa, a peculiar irritable excitement, great restlessness, the patient showing signs of considerable distress, but at the same time professing to feel well, much better when interrogated, small, feeble but frequent pulse, a tremulous tongue, great somnolency, &c.

This form can be so easily distinguished from either of the other two by the diagnoses given in treating of them, and by its own enumerated symptoms as to render a particular diagnostic essay unnecessary.

There are three grand indications of cure: First, to allay the arterial and febrile excitement. Second, to open the portal system where it is locked, and to change the irrtiated state

of secretion generally; and thirdly, to prevent its running into a typhoid state. When there is a hard pulse, pain in the head, and a torpid state of the bowels, general blood-letting is indispensable, and should be resorted to in the height of the paroxysm, to such an extent as to overcome entirely the hardness of the pulse, and afterwards repeated at any time when the hardness returns. Great care however is necessary, and a close observation of its effects. Much bleeding, or bleeding in persons of weak, relaxed habits, or on any other pulse than a hard one, produces an irritable state of excitement that favors a typhoid tendency. A teaspoonful of spts. nitri dul. should be given in water, in adult cases, every two hours, during the exacerbation, when the stomach will bear it. During the remission, if there should be any, two teaspoonsful of spts. mindereri may be given every two hours until the exacerbation, when the nitre should be resumed. The surface should be regularly sponged off every few minutes with warm vinegar and water. The head should be frequently wet with cold water, when there is considerable pain with heat in it; when the pain is unattended with great heat, spts. camphor should be used instead of water. Also when there is on the surface generally an acrid or pungent heat, cold water may be used as a wash instead of the warm vinegar and water, if it does not produce a sensation of chilliness. For a drink, soda water may be allowed and cream of tartar water where the bowels are not too active.

To fulfil the second grand indication, we depend on calomel. A small dose of it, say 8 grs., taken at bed time and worked off next day with castor oil, and followed up two or three times if necessary, will probably in most cases break up an attack. When the attack is sudden or the fever completely formed before the physician is called, the doses should be larger, say 15 grs., and followed if necessary by castor oil or rhubarb. Should the operations be watery, stop them immediately by laudanum or opium in substance, and repeat the calomel. And where the operations are consistent, the bowels should be permitted to rest for six hours before the repeti-

tion. This course should be unremittingly followed till the secretions in general, and the alvine in particular, become healthy, or the fever is broken. Where there is a bilious purging from the commencement or where it occurs at any time during the course of the fever, I am in the habit of giving, in the place of calomel alone, the following powder: cal. 5 grs., opii. ½ gr., ipecac. ½ gr. or 1 gr., when the stomach will bear it, every three hours until four are taken, following them in four hours after the last with castor oil if necessary, and restraining the operations with laudanum if they should be too large or watery. This course should be repeated every 24 hours till the desired effect is produced.

When this course does not effect a cure and the fever threatens to assume the typhoid type, to fulfil the third indication, a sinapism should be applied to the spine once every 24 hours, to remain long enough each time to make the skin very red. This will stimulate the ganglionic nerves supplying the liver, where they are much oppressed by disease. This application is necessary where the discharges from the bowels are of a dark muddy color and watery. Without it, the internal remedies fail of having their desired effect. Should the fever be of the typhoid type when the physician is called, or should it appear to be assuming that type under his hands, if the tongue is moist enough to allow it, a powder should be given, composed of 3 grs. quinine and 4 grs. calomel, every four hours, until four are taken. They should be followed by oil about five hours after the last powder. This course should be repeated every 36 hours until the fever is broken or the gums are affected by the calomel, when it should be omitted, while the quinine may, if necessary, be continued. I have feared to give the quinine where the tongue is of a dry red colour or black, nor do I recollect seeing it recommended in such cases by any author. In its stead I give carbo ligni, finely pulverized, in 20 gr. doses every four hours, as long as it does not produce unpleasant sensations at the stomach. And every 24 hours, give a course of the camphorated powders, used in the treatment of the congestive variety, at inter-

vals of three hours, following each course by a cathartic if necessary, until the tongue becomes moist and the secretions free. In this stage of the fever stimulants frequently become necessary; and Port or good Madeira wine seems to answer best. They should be used in those cases only where the vital powers of the system rapidly sink. Wine given at short intervals, assisted by stimulating frictions of the surface, will keep up an action long enough to permit the other medicines to affect the secretions in cases which would otherwise prove fatal.

At any stage after the inflammatory diathesis is subdued, when there is a dry tongue of a brown or bright red color, attended with bilious purging, blisters should be applied to the bowels, and to the back of the head and to the ankles when the head is much affected.

Whenever the symptoms of a slight chill introduce such paroxysm, should the tongue be moist, the chill may be broken up by the use of calomel and quinine at intervals of three hours before it is expected. Quinine may be used separately if the purging forbid the use of calomel.

After the secretions become free, and a remission or intermission is fairly established, tonics should be freely used to complete the cure.

And, in conclusion, as tartar emetic might be mentioned as a remedy in this form of fever, I will state the result of my experience respecting it in few words. In the commencement of this form, when bilious matter is frequently vomited, and the presence of bile in the stomach causes a constant sickness, a gentle emetic of tartar is very serviceable, perhaps indispensable. But, given in every case indiscriminately, it produces an irritable state of excitement, which increases a typhoid tendency. Given in either of the preceding varieties, the effects are almost invariably fatal.

November, 1841.

ART. VII.—*Remarks on a Review of an Essay on Trembles, Milk-sickness, &c.* By JOHN S. SEATON, M. D.

IT will be recollected by the readers of this Journal, that the November No. contains a review of a small pamphlet published by me during the past summer, on the cause of "Milk-sickness, Trembles, &c." If Dr. Drake, the author of that critique, had done justice to my views therein expressed, or if all who read the Journal had an opportunity of reading my pamphlet likewise, I would feel willing to let the whole pass without publicly noticing the criticism. But neither being the case, I feel myself called on to reply to Dr. Drake, and defend my expressed proposition.

I have said that the critic failed to mete out justice to the views contained in the pamphlet on the cause of the above named diseases, and I may add, as at least strong negative proof in support of this general charge, that the verdict of every man, professional and non-professional, with whom I have conversed, and who had read both the pamphlet and the review, is in full and entire coincidence with this declaration.

But a general charge cannot be sustained without specific items, and for this reason I will particularize a few out of many points in the criticism that are at variance with justice, both to myself and to the subject, in order to establish what I have said.

And 1. Dr. Drake did not disclose the reasons that I gave, for not having subjected the water of the different springs, etc., that I visited, to chemical analysis.

2. Dr. D. conveys the idea, that I assume the ground that *arsenical iron pyrites* is the universal cause of the disease, an opinion not only not advanced by me, but expressly denied on page 41 of the pamphlet. The reason why I spoke so freely and fully of the Iron, and especially of the sulphuret or pyrites, was because I found it in such great abundance in those sections, and also because of the ready and rapid spon-

taneous decomposition of the pyrites containing the arsenic.

3. The Professor at least intimated very plainly, that I had declared the "Milk-sickness" to be common to *all* sand or free-stone localities, which is not the fact, as he himself will see, if he will but trouble himself enough to read my pamphlet attentively, and give to my expressions their legitimate import or meaning. On page 10, I argued and averred, that the "*pure* and *thorough* limestone regions were exempt," while the regions containing the *impure* orders of lime-stone, mixed with sand-stone, or the almost entire sand-stone formation, were the ones in which the diseases abound to the greatest extent. This, however, neither affirms nor implies, that the diseases in question are present in *all* such localities in the South and West, and to read it in such sense, does violence both to my language and my meaning. But in the regions where those diseases prevail, I again assert, (Dr. D.'s assertions to the contrary, nevertheless,) that such is their geological constitution; while in the exclusive or entirely *pure* limestone lands, not containing beds of diluvial deposition, or any of the enumerated materials characteristic of the "coal measure," the diseases in question never have occurred, and never will occur, either *endemically*, or *sporadically*, unless they be transported. In such, for instance, as that portion of Jefferson County above Louisville, known as the "Bear-Grass settlement,' a goodly portion of Shelby, Fayette, and Bourbon Counties in Kentucky, and in the *pure blue* limestone around Cincinnati, Ohio, with innumerable other localities which might be mentioned, those diseases never did, and never will, appear. We might as reasonably, and with about as fair a chance of success, expect to find a gold mine in the public streets of Louisville or Cincinnati, or mountains of snow, and icebergs, in the centre of the Torrid Zone, as to expect to find "Milk-sickness" in such situations.

But 4. The most astonishing feature in the "Criticism" is contained in the paragraph in which Dr. Drake denies the above premise in the arsenical hypothesis, and endeavors to

annihilate by the fiat of his own word, the geological distinctions laid down in the pamphlet.

With due and ample respect and regard for Dr. Drake's erudite attainments, and a prudent reverence for his respectable (even venerable) age, candor, truth, justice, and the subject in hand, compel me to say, that by this open and unqualified denial, and by referring to the different rivers in Kentucky, Ohio, and Indiana, which he has done, he has proved himself to be, either utterly ignorant of the subject on which he wrote, or totally regardless of, and recreant to the truth. I am prepared to say, and to establish, (if indeed many of as good men as live in Kentucky dare be believed,) that *sandstone* exists in abundance on the Kentucky river, at many points, but especially a short distance below Boonsborough, and at or near the mouth of Eagle creek, below Frankfort, and with it also is found the spurious or impure limestone. The same thing is true of many places on the Licking river, while abundance of good pure limestone exists in many portions on each river.

In relation to "all the Western tributaries of the Scioto river, in Ohio," I ask no better proof against the Professor's allegation in his review, than is to be found in the "Memoir on Milksickness," from his own pen in March last. Why did Dr. Drake in so short a time contradict what he said under the "Caption" on page 6th of the "Memoir"? Which statement is true, himself being umpire? In many places on the Miamis, the sandstone is abundant, being imbedded in a sandy soil, which is underlaid by a deep bed of diluvium, consisting of pebbles, sand, gravel, and clay, etc. This I state upon the authority of three citizens of this county, of unimpeachable veracity, and whose names I am at liberty to give, if necessary. But we will examine the stony formation in the bottoms of those rivers, and see how far it comports with the premise in the "Arsenical Hypothesis." Beginning at Columbus on the Scioto, in Franklin County, we find the river flowing over a stratum of "Cliff limestone" which is very impure, because of the magnesia, alumina, sand, and the abun-

dance of sulphur and iron in the form of *pyrites* contained in it. At Chillicothe, in Ross County, it traverses the *black shale*, which overlays the "cliff limestone," and which also contains the pyrites in abundance. At Waverly, in Pike County, it runs on the fine grained sandstone, (which is remarkable because of the quantity of sulphur and iron it contains), and at its mouth is found on the coarse sandstone, which constitutes the base of the coal formation.

The Miami rivers, above Clifton on the one side and Troy on the other, are flowing over the "cliff limestone," and in that region the "milk-sickness" abounds; but below those towns the rivers flow over the *pure blue limestone*, and there the disease is unknown. At Brookville, on White-water, in Indiana, the blue limestone occurs; but it is there covered to the depth of many feet by a thick bed of diluvial or transported materials, consisting of clay, sand, gravel, and an immensity of the fragments of "cliff limestone."

In Preble county, situated on the Western border of Ohio, and through which several of the Western tributaries of the greater Miami pass, the "milk-sickness" prevails where the "cliff limestone" is covered to the depth of 40 feet, by the same kind of diluvium, &c. For the accuracy of the above statements, see "Geological report on the State of Ohio."

Such stony formation under-laying the streams which bound and pass through the "Virginia military district," such soil and timber growth, as is described by Dr. Drake, at the top, and growing on the surface of the plateaus or table lands, at once assure us, in the absence of all other testimony, of the presence of *inferior* limestone, sandstone, etc., etc., with more or less mineral substances.

If the latter be not true, then it is not a fact that geology and botany have a reciprocal relation. But we have other and ample testimony, and that, too, of the most "indubitable" character, equally as "*indubitable*" as the testimony upon which Dr. D. relies so confidently, in support of the *fact*, relative to the *fate* of the herd of "cattle," a part of which were pastured on *meadowed* land, while the others were kept upon an adjoining "wood land," &c.

But the professor assures us that the clearing and culture of the land has proved to be an *infallible preventive* in the State of *Ohio*, and adds: "We know of no fact going to prove that the same process would not be effectual every where." It may be true that Dr. D. *knows* of no fact going to prove the contrary, for I apprehend he has not tested the matter by observing for himself, and as nothing can properly be denominated *knowledge*, that has not been conveyed to the mind by one or more of the five senses. But I think a sufficiency of *facts* of at least a *veritable* aspect have been presented, contradictory of the Doctor's assumption, to induce *faith* in him of an opposite kind, if he were not *indeed* a thorough sceptic on the subject. If he will only turn to page 90 in the first number of the ninth volume of "Transylvania Journal of Medicine" he will see that his assertion relative to the *entire* efficiency of clearing and tilling the land in Ohio, as a means of prevention, was contradicted by Dr. McAnelly, of Ky., five years before its promulgation; and on page 87 of the same number he will find it again contradicted by Dr. Shelton, of Alabama, relative to *cultivated* land in Tennessee and Indiana. And if the settlers in the places to be named, can be accredited, it has not been sufficient on Beaver creek and Palloca, Indiana, in a small section below Hardinsburg, in Breckinridge, and on Panther creek, in Davis county, Ky., &c.

It may be true that too much attention has been bestowed on the cause of the *diseases*, but it is yet as interesting and of as much importance to the profession, as well as the people, as it was in *March last*, and surely it merits a much graver consideration than does another disease common to cattle, and which finds place occasionally in our Western periodicals, the *Murrain*.

In conclusion, I will add that since the publication of my pamphlet, I have possessed myself of many valuable facts by experimenting and otherwise, and while the matter is in hand, and the investigation pending, I am willing to meet any man in the west, in any periodical, and defend the "*Arsenical* Hypothesis," against the whole vegetable kingdom. I believe

the arsenic is contained in spring water, in some instances, in *licks* in others, and is often exhaled from the earth in dry weather, and settles on the herbage; perhaps it rises in the form of *Arsenuretted Hydrogen*, is decomposed by the air, and the arsenic thrown down, &c. But the facts are what we want; and will any opponent of the *Arsenical Hypothesis* join issue on equal terms and oppose it before the reading public?

Dec. 30, 1841.

ART. VIII.—*Singular Phenomena accompanying Menstruation and Uterine Hemorrhage.* By Dr. J. E. SANDS, of Wilson county, Tennessee.

Mrs. B., a native of the State of Georgia, is 56 years old, and has 8 children. She is quite fleshy; has dark eyes, red hair, and a thin, tender, white skin; is of a very lively, cheerful disposition; labors hard and takes a great deal of exercise.

On her left side, commencing about the second false rib, is a line three-fourths of an inch wide which passes directly upwards a little external to the mamma, and stops two inches from the clavicle. Here it divides into three branches of about half its own width; the outer branch, three inches long, passes obliquely upwards and outwards nearly to the scapulo—humeral articulation, where it terminates in a prominence about the size of a half-ounce bullet; the inner one, of the same length, runs obliquely upwards and inwards almost to the junction of the clavicle and sternum, and terminates like the first; the third branch, an inch and a half long, pursues an intermediate course and terminates like the others.

She began to menstruate at the age of 12, and continued to do so regularly until she was 25, when she married; three months afterwards conception took place, and the catamenial discharge ceased. At the usual period she gave birth to a

son; two weeks afterwards the menses made their appearance again, and recurred at regular intervals until she was six months advanced in her next pregnancy. The same thing attended all her subsequent pregnancies. At the age of 49 the menses ceased entirely, after which she had no flow of any kind from the uterus until last December, when she suffered with a violent hemorrhage from that organ.

At every menstrual period, from the time menstruation began until it ceased, a fluid resembling the catamenial discharge in all its sensible qualities flowed from the mark or lines described above; the discharge from this part observed precisely all the changes of that from the uterus.

From the birth of her last child, which was in her 38th year, till the final cessation of the menses, she was subject to uterine hemorrhage, and the flow from the side was in direct proportion to that from the uterus, being profuse when the latter was profuse, and ceasing when it ceased. A similar discharge accompanied her last attack of hemorrhage in December.

The skin on these marks or lines is slightly elevated, of a dark red color, assuming somewhat the appearance of an aneurismal tumor. The discharge, to use her own expression, "comes out like the perspiration through the skin." No perspiration is ever discovered on these marks, although she generally perspires freely.

May, 1841.

Selections from American and Foreign Journals.

Rheumatism of the Skin.—The *Archives Generales*, for September, just received, contains a paper on Rheumatism of the Skin, by J. H. S. Bearr, of which we shall present a short summary. After some preliminary remarks on neuralgia of the skin, called, by M. Provoy, dermalgia, he remarks that, in some cases, this neuralgia is evidently rheumatismal, occurring in rheumatic patients, and partaking of other of the characteristics of rheumatic pain. Rheumatism of the skin occurs oftener in men than in women—usually in adults. It is produced by any of the causes of Rheumatism, particularly by exposure to cold. It may be seated in any part of the skin, but is most common on the scalp and upon the lower extremities. The pain is of two kinds—one fixed, the other intermittent; the former is usually slight, the latter more severe. The fixed pain is much augmented by touching the skin even very slightly, and in this way, too, the flying pains, as they are called, may be produced. The skin is not changed in appearance, be the pain ever so severe; sometimes it is dry, sometimes very moist. The duration of the complaint is from two to fourteeen days; the termination, like the accession, is gradual. It frequently returns and varies its point of attack, two distant parts of the skin are, however, very rarely affected at the same time. Rheumatism of the skin often alternates with that of the muscles, the ligaments, or the nerves, but it does not often complicate them. M. B. has known fever to accompany this disease in three cases, which he gives. We shall translate one, abridging it considerably.

Case.—A young law student was exposed to a cold rain, and remained in wet clothes for some time. Next morning I found him with fever, thirst, loss of appetite, headache and continued chills; the skin was dry and painful through its whole

extent, particularly over the chest and extremities, the pain was lancinating, and was augmented by the slightest touch—even by the chafing of the bed clothes. This pain might have been attributed to rheumatism of the superficial muscles, but the motion of the limb was not painful, except when the skin was brought in contact with something.

The patient was put on the use of demulcents, and the symptoms disappeared in five days.

Rheumatism of the skin may be confounded with that of the muscles, the nerves, or the fibrous tissue of the joints; the diagnostic symptoms are that the pain is superficial, that it intermits, that it is augmented by the slightest pressure, even brushing the skin with the feather of a quill, or touching the hairs by which the affected part may be covered, and that it is not aggravated by motion of the limb. The prognosis is favorable and the treatment the same as that of other rheumatic inflammations.—*N. Y. Med. Gaz.*

Poisoning from the use of a Tobacco Enema.—A strong man, aged 55, who had for some time labored under dysuria, from enlarged prostate, and more recently had suffered from ascarides in the rectum, received an enema, made by infusing 12 grains of tobacco in 12 oz. of water. Seven or eight minutes afterwards he appeared in a slight stupor, had headache, and unusual paleness of the face. He complained of pain in the belly; his answers to questions were not clear. Two purgative injections were given, sinapisms applied, stimulants given and a small quantity of blood (three pallettes) taken. The paleness increased, coma and convulsions followed; extreme prostration, and finally death closed the scene.—*Rev. Med.*

Remarks.—We are induced to copy this case, that we may impress, if possible, our readers with our own conviction of the extreme danger from tobacco enemata. Early in professional life, a case came to our knowledge, which has ever served to keep us from this remedy. A young sailor, healthy and robust, was admitted into the Pennsylvania Hospital with strangulated hernia; the taxis, &c., were tried in vain. An operation was resolved on; somebody suggested a tobacco enema; it was tried, and in less than two hours the poor fellow died, prostrated, poisoned by this unlucky remedy. A method of

using this remedy per anum, which was lately resorted to by our friend, Dr. Jno. R. McComb, may be attended with less risk than the enemeta. He enveloped a dose of tobacco in a fine linen rag, put it up the anus as a suppository, and as soon as the nausea was produced, removed the whole. This is probably an improvement, but even thus we should resort to tobacco only at the last extremity and then with fear and trembling.—*N. Y. Med Gaz.*

Conium and Opium.—The following comparative view of the respective effects of conium and opium, is from a paper in the Med. Bot. Trans., vol. 1. pt. 4, by Mr. Judd:

Conium.	Opium.
Brain unnaturally free from blood; ventricles almost dry.	Brain gorged with blood; ventricles full of serum.
Lungs empty of blood.	Lungs so full of blood, that it runs out in a stream on their being cut.
Villous coat of the stomach and esophagus, white.	Villous coat and esophagus red.
Right side of the heart gorged with blood; left side empty.	The heart's cavities all contain blood.
Heart dead to stimuli.	Unknown whether so or not.
Intestines active and white.	Intestines inactive, red and inflamed.
Blood dark and fluid in both veins and arteries.	Blood at times, but not always, fluid.
Death of the heart.	Death, as I conclude from the other symptoms, of the brain.

From his comparative experiments with the two drugs, Mr. J. doubts whether conium ever produces sleep, as opium does, by rendering the vessels of the brain turgid. From the power displayed in his experiments by conium, in lessening the quantity of blood sent to the brain and spinal cord, and also in lessening the force of the heart's action, Mr. J. concludes that it may be a valuable remedy in hypertrophy of the heart, in phrenitis and in inflammation of the spinal marrow. The experiment is worth trying.—*N. Y. Med. Gaz.*

Report on the Treatment of Burns in the Hospital of La Charite. Translated and abridged, for the Medical Gazette, from L'Experience, of 30th Sept., 1841.

Burns, admitted into the Hospital of La Charite, in the wards of M. Velpeau, are generally arranged, according to their depth, after the classification of Dupuytren, which comprises six varieties, namely, burns of the first degree, or those attended with an erythematous blush of the skin; burns of the second degree, or those in which the cuticle is raised in blisters; burns of the third degree, or those in which the true skin is involved; burns of the fourth degree, which reach the subcutaneous tissue; burns of the fifth degree, in which the soft parts are deeply involved, and burns of the sixth degree, in which the whole part is destroyed.

M. Velpeau resorts to three principal methods of treating these several varieties. If the burn is of the first degree, and not extensive, simple refrigerants, or the local discutients usually employed, will be sufficient. But Baynton's method of dressing the parts with straps of diachylon plaster, will almost always arrest the evil; the same treatment is applicable to burns of the second and even of the third degree. A single dressing is sufficient for burns of the first degree, and it rarely happens that the cure is not found to be complete, on raising the straps at the end of the third or fourth day. In burns of the second degree, M. Velpeau first raises the epidermis from the blisters, and carefully cleanses the surface beneath, with a linen cloth; he then applies the straps, and usually two or three such dressings will bring about desiccation and cicatrization of the whole surface.

At La Charite, during this year, burns of this variety, which covered almost the whole length of the fore-arm, have been cured in six or seven days, by two dressings only. If the burn is of the third degree, a greater number of dressings will be required, and the cure will rarely be effected in less than fourteen or fifteen days, because the eschars must slough off from the burnt surface before cicatrization can take place.

This very simple method of dressing requires, however, some care; it is not proper, when the affected part is the seat of a decided inflammatory swelling, nor when the burn extends over a large surface. Moreover, it cannot be applied to the face, the neck, the thorax, the abdomen, nor to the extremities, where they are united to the trunk. Hence it is to be used upon the arm, the fore-arm, the hand, the thigh, the leg,

and the foot. For other parts, particularly the face, M. Velpeau prefers the liniment composed of equal parts of lime-water and olive-oil, well-beaten together; this produces very happy results, and may be applied four or five times a day, with the feather of a quill. If the burn is on the face, it is not to be covered with dressings, except that it is well to place over it a sheet of scorched paper, after each application of the liniment.

Of the cases which have been treated at La Charite during the summer, the two following may be cited:

A man employed in the privies, set fire to the gas in one of the places which he was cleaning, and the whole of his face, the fore part of his neck, and both his hands, were burnt in the first, second, and third degrees. He was brought into La Charite the day after the accident, with the appearance of having been broiled, and the only application resorted to was the immediate use of the liniment above referred to; the result was, that at the end of nine days after the accident, he was able to go out and attend to his business, his face and arms being entirely free from purulent secretion or excoriation.

Case II.—A young girl was severely scalded over the whole face, the forehead, the supra-hyoideal region, and the greater part of both hands, and was admitted into La Charite on the third day, at which time there was erysipelatous swelling and decided reaction over the whole extent of the injured surface. The burn was of the first degree at some points, of the second in others, and of the third in spots over the malar-bones. The parts had been dressed, previous to her admission, with the lead ointment, which was suspended, and the ointment of oil and lime-water was immediately applied, and the pain, heat and swelling began to subside at once; the burnt surfaces diminished by degrees, and on the eighth day the cure was completed.

This is the treatment which the Professor of La Charite recommends as particularly applicable to burns of the three first degrees, when they occupy an extensive surface, or occur in parts difficult to dress, or which are habitually exposed to the air. It is hardly necessary to add, that these two methods of dressing are of little value in burns attended with deep eschars, for in these suppuration and sloughing of the eschars must take place, after which the proper means must be taken to produce cicatrization of the ulcers.

In the treatment of extensive burns of the body and limbs, M. Velpeau has tested the comparative merits of cotton, cold water, and chlorine water, and has come to the conclusion

that cotton is not more efficacious than charpie (lint); that cold water produces much the same effects as the chlorine solution: and that simple salt water, so long a popular remedy, is really the best application.

It is necessary to add, that burns which extend over at least half the body, and in which the whole thickness of the skin is involved, rarely fail to destroy the patient during the first two or three days, or when re-action comes on, or else during the process of suppuration, and that in these cases no treatment offers a probable chance of success; but no cases of this kind have occurred among the 18, cited by Mr. Velpeau, in his report of this year.

Dr. Staats, of Albany, has had such surprising success in the treatment of gonorrhœa, by the extract of cicuta, that he has addressed the Medical Society on the subject. In giving it to a patient with neuralgia, who happened also to have the other complaint, he was relieved of both by four grains every four hours till the system was under its influence. Since, he has cured several cases, giving the same dose once in four hours till dizziness was produced, to be followed by a dose of Epsom salts.—*Bost. Med. Jour.*

M. Levy, of the Military Hospital, Val de Grace, Paris, commends very highly the use of quinine in the dropsy which follows intermittent fever, and which generally depends on enlarged spleen. M. Levy believes that the spleen is often engorged before the first paroxysm of fever, and he says that close enquiry will generally satisfy us that there is pain and tenderness in the left hypochondriac region, and that the enlarged spleen can frequently be felt or detected by means of percussion. Whenever this is the case, when there is pain, tenderness, or manifest enlargement of the spleen, he advises cupping to the part, repeated from time to time, till these symptoms disappear. Then he gives the quinine. If dropsy supervene after the fever is broken, whether it be ascites, anasarca, or both, he gives the quinine in moderate doses and perseveringly. This will generally remove the en-

gorgement and cause the absorption of the fluid. Mr. L. gives two cases to illustrate these views. His opinions were new to us, though published some time ago. We commend them to the notice of our country readers, under whose care many cases of intermittent will come at this season. In particular would we advise the early and careful examination of the region of the spleen, both by touch and by percussion. This, by the way, is one of the cases in which the auscultory percussion, as first practised by our friends, Drs. Clark and Camman, of this city, and of which a notice appeared in the 4th No. of the N. Y. Journal of Medicine and Surgery, would be useful. The spleen being carefully examined, if there is any pain, tenderness, or enlargement, let the part be freely and frequently cupped till the symptoms are relieved. Then quinine will be proper.

As to the use of quinine in dropsy, it is contrary to established rule, and if tried, it should always be done cautiously. A cautious trial, the authority of M. Levy, whose experience as a Military Surgeon qualifies him to speak pretty confidently, would justify.—*New York Medical Gazette.*

On the Condition of the Nails in Fractured Limbs.—Dr. Pitschaft mentions, as a remarkable fact, that the nails do not grow during the union of a fracture, and that the commencement of growth in them is proof that the fracture has united. Dr. Lesler is mentioned as the first who ever observed this. Does this arrest of growth depend merely on the fracture of the limb, or is it, as the editor of the British and Foreign Review suggests, but indirectly connected with the fracture, depending on the well known principle, that the growth of the various horny tissues depends on the amount of waste to which they are exposed. The subject should be investigated.—*New York Medical Gazette.*

Extract of Belladonna in Paraphimosis.—A child, three years and a half old, had a severe paraphimosis; the glans red, swollen, and tender; the prepuce strongly drawn back, forming a thick and apparently adherent ring, the constriction of which completely stopped the circulation. This state had lasted eight days, and the sufferings were extreme. Reduction being impossible, leeches to the perineum and hypogas-

trium, cooling drinks, emollient enemata, cataplasms, lotions and hip baths were all tried, but with little good effect. All the symptoms were aggravated, the glans became bluish, and gangrene was threatened, when M. Mignot employed frictions round the glans with an unguent, composed of thirty parts of simple cerate and twelve of extract of belladonna. Under the influence of this remedy, the constriction relaxed, the tissues resumed their normal appearance; no loss of substance or suppuration followng.

The second patient had acute balanitis following gonorrhœa; the paraphimosis was severe. The patient would not submit to the operation; the belladonna was applied with complete success. It was given with the like effect in a case of paraphimosis, accompanied by chancres and sympathetic bubo. In three days the cure was complete.—*Brit. and For. Med. Rev.*

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EDITORIAL DEPARTMENT.

After presenting to our readers the compliments of the season, and wishing for each his complement of holy-day enjoyments (none of course being unhallowed) with greater success in acquiring and curing patients throughout the coming than he had in the departing year; after all these gratuitous expressions of kindness to them, we beg leave to add for their further gratification, that, by our request, the publishers of the Journal have engaged, as assistant and junior editor, our young friend, T. W. Colescott, M. D., already advantageously known to our readers, as a translator from the French of some of the valuable foreign articles published by us. It will be the special duty of Dr. C. to edit (we had almost said correct) and fit for publication, such MSS. as have been thrown off by their authors so hastily, as to require some modification. He will likewise be charged with the supervision of the press, and with the preparation of such analytical reviews and bibliographical notices, as will supply our felt and admitted, but unavoidable deficiencies.

STATE MEDICAL SOCIETY OF KENUTCKY.

We beg leave to remind our Kentucky readers of the meeting of this society on the 12th inst at Frankfort. Being the first, it should be well attended and enriched with valuable contributions. If such should not be forthcoming, the meeting will be to little purpose.

D.

LITHOTOMY.

Why is it that so many children of the West have urinary calculi? The four latter operations for lithotomy which we have had an opportunity of witnessing, were on small boys. The last was under four years of age, and had shown signs of calculus for 10 months. The operation was performed by Professor GROSS, before the Medical Class, in the Amphitheatre of the Louisville Hospital. The calculus weighed half an ounce, and belonged to the mulberry species. It is nine days since the operation, and the little patient is doing well.

D.

PHYSIOLOGICAL TEMPERANCE SOCIETY.

A society has been organized in the Medical Institute of Louisville, under the above title. Its object is to investigate the whole subject of alcoholic intemperance, together with the abuse of other stimulants and narcotics. As far as we know, over stimulation has not before been made a *speciality*, though from its prevalence and desolating effects, it well deserves such consideration. The society, which was organized as late as the 23d ult., already embraces more than a hundred members. Its meetings are semi-monthly; from the first of November to the first of March, in the hall of the Institute; where papers will be read and discussions carried on, relative to the causes, pathological effects and therapeutic means, both prophylactic and curative, of intemperate stimulation with intoxicating beverages and other excitants. The society respectfully invites communications on all the topics lying within its purview; and especially autopsic reports on those who have died from intemperance. The officers for the present year are *President*, Dr. DANIEL DRAKE; *Vice-Presidents*, Dr. TH. J. KENNEDY, of Tenn., Mr. C. J. CLARK, of Ala., Mr. H. C. HOLMES, of Mi., and Mr. E. R. ROE, of Ia.; *Secretary*, Mr. T. BOHANNAN; and *Treasurer*, Mr. J. F. BULL, both of Louisville.

D.

THE ALLEGED DISCHARGE OF HAIRS FROM THE HAND.

The Lexington papers announce that Miss Penelope Stout's case is a hoax. The young Miss was detected sticking the hairs and bristles under the thumb nail.